Author Index

A

Abkowitz, J. L., Fialkow, P. J., Niebrugge, D. J., Raskind, W. H., and Adamson, J. W. Pancytopenia as a clonal disorder of a multipotent hematopoietic stem cell. 258.

Abrams, C. K., Hamosh, M., Hubbard, V. S., Dutta, S. K., and Hamosh, P. Lingual lipase in cystic fibrosis. Quantitation of enzyme activity in the upper small intestine of patients with exocrine pancreatic insufficiency. 374.

Abras, E., *See* Cortas, Abras, Arnaout, Mooradian, and Muakasah.

Abumrad, N. N., *See* Radosevich, Williams, McRae, Lacy, Orth, and Abumrad.

Adamson, J. W., *See* Abkowitz, Fialkow, Niebrugge, Raskind, and Adamson.

Alaupovic, P., *See* Milne, Weech, Blanchette, Davignon, Alaupovic, and Marcel.

Adcock, E.W., *See* Oelberg, Chari, Little, Adcock, and Lester.

Agoston, S., Maestrone, E., van Hezik, E. J., Ket, J. M., Houwertjes, M. C., and Uges, D. R. A. Effective treatment of verapamil intoxication with 4-aminopyridine in the cat. 1291.

Al-Awqati, Q., *See* Gluck and Al-Awqati.

Alexander, A. N., *See* DeBold, Sheldon, DeCherney, Jackson, Alexander, Vale, Rivier, and Orth.

Alexander, M. A., *See* Guerry, Alexander, Herlyn, Zehngebot, Mitchell, Zmijewski, and Lusk.

Almagor, M., Kahane, I., and Yatziv, S. Role of superoxide anion in host cell injury induced by *Mycoplasma pneumoniae* infection. A study in normal and trisomy 21 cells. 842.

Amento, E. P., Bhalla, A. K., Kurnick, J. T., Kradin, R. L., Clemens, T. L., Holick, S. A., Holick, M. F., and Krane, S. M. 1α,25-Dihydroxyvitamin D_3 induces maturation of the human monocyte cell line U937, and, in association with a factor from human T lymphocytes, augments production of the monokine, mononuclear cell factor. 731.

Amirian, D. A., *See* Soll, Amirian, Thomas, Reedy, and Elashoff.

Arias, I. M., *See* Inoue, Kinne, Tran, and Arias.

Arnaout, M. A., *See* Dana, Todd, Pitt, Springer, and Arnaout.

Arnaout, M., *See* Cortas, Abras, Arnaout, Mooradian, and Muakasah.

Arner, P., Bolinder, J., Engfeldt, P., Hellmér, J., and Östman, J. Influence of obesity on the antilipolytic effect of insulin in isolated human fat cells obtained before and after glucose ingestion. 673.

Ashley, R. L., and Corey, L. Effect of acyclovir treatment of primary genital herpes on the antibody response to herpes simplex virus. 681.

Atlas, S. A., Hesson, T. E., Sealey, J. E., Dharmgrongartama, B., Laragh, J. H., Ruddy, M. C., and Aurell, M. Characterization of inactive renin ("prorenin") from renin-secreting tumors of nonrenal origin. Similarity to inactive renin from kidney and normal plasma. 437.

Aurell, M., *See* Atlas, Hesson, Sealey, Dharmgrongartama, Laragh, Ruddy, and Aurell.

Austen, K. F., *See* Lewis and Austen.

B

Babior, B. M. The respiratory burst of phagocytes. 599.

Baker, P. E., *See* Ball, Guyre, Shen, Glynn, Maliszewski, Baker, and Fanger.

Bakhshi, A., *See* Cossman, Neckers, Braziel, Trepel, Korsmeyer, and Bakhshi.

Ball, E. D., Guyre, P. M., Shen, L., Glynn, J. M., Maliszewski, C. R., Baker, P. E., and Fanger, M. W. Gamma interferon induces monocytoid differentiation in the HL-60 cell line. 1072.

Barnett, E., *See* Saxon and Barnett.

Barstad, L., *See* Neuringer, Connor, Van Petten, and Barstad.

Barron, W. M., Stamoutsos, B. A., and Lindheimer, M. D. Role of volume in the regulation of vasopressin secretion during pregnancy in the rat. 923.

Bar-Shavit, Z., Kahn, A. J., Pegg, L. E., Stone, K. R., and Teitelbaum, S. L. Glucocorticoids modulate macrophage surface oligosaccharides and their bone binding activity. 1277.

Baud, L., *See* Schlondorff, Satriano, Hagege, Perez, and Baud.

Baum, R. A., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.

Behar, J., *See* Biancani, Walsh, and Behar.

Berk, M. A., *See* Rosen, Clutter, Berk, Shah, and Cryer.

Bernard, G. R., Lucht, W. D., Niedermeyer, M. E., Snapper, J. R., Ogletree, M. L., and Brigham, K. L. Effect of *N*-acetylcysteine on the pulmonary response to endotoxin in the awake sheep and upon in vitro granulocyte function. 1772.

Berndt, M. C., *See* Booth, Berndt, and Castaldi.

Bernstein, G. S., *See* Carmel and Bernstein.

Bhalla, A. K., *See* Amento, Bhalla, Kurnick, Kradin, Clemens, Holick, Holick, and Krane.

Biancani, P., Walsh, J. H., and Behar, J. Vasoactive intestinal polypeptide. A neurotransmitter for lower esophageal sphincter relaxation. 963.

Biemond, P., van Eijk, H. G., Swaak, A. J. G., and Koster, J. F. Iron mobilization from ferritin by superoxide derived from stimulated polymorphonuclear leukocytes. Possible mechanism in inflammation diseases. 1576.

Bina, M., *See* Cines, Lyss, Reber, Bina, and DeHoratius.

Birnbaumer, L., *See* Dighe, Rojas, Birnbaumer, and Garber.

—, *See* Dighe, Rojas, Birnbaumer, and Garber.

Bistrian, B. R., *See* Hoffer, Bistrian, Young, Blackburn, and Matthews.

Blackburn, G. L., *See* Hoffer, Bistrian, Young, Blackburn, and Matthews.

Blaese, R. M., *See* Tosato, Steinberg, Yarchoan, Heilman, Pike, De Seau, and Blaese.

Blanchette, L., *See* Milne, Weech, Blanchette, Davignon, Alaupovic, and Marcel.

Blattner, W. A., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.

Blayney, D. W., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.

Bloom, W. S., *See* Gabbiani, Kocher, Bloom, Vandekerckhove, and Weber.

Blumenstock, F. A., *See* Deno, McCafferty, Saba, and Blumenstock.

Bockman, R. S., *See* Warrell, Bockman, Coonley, Isaacs, and Staszewski.

Boden, G., Rezvani, I., and Owen, O. E. Effects of glucagon on plasma amino acids. 785.

Bogardus, C., Lillioja, S., Mott, D., Reaven, G. R., Kashiwagi, A., and Foley, J. E. Relationship between obesity and maximal insulin-stimulated glucose uptake in vivo and in vitro in Pima Indians. 800.

—, Lillioja, S., Stone, K., and Mott, D. Correlation between muscle glycogen synthase activity and in vivo insulin action in man. 1185.

Bohan, T. P., *See* Roe, Millington, Maltby, Bohan, and Hoppel.

Bolinder, J., *See* Arner, Bolinder, Engfeldt, Hellmér, and Östman.

Bo-Linn, G. W., Davis, G. R., Buddrus, D. J., Morawski, S. G., Santa

Ana, C., and Fordtran, J. S. An evaluation of the importance of gastric acid secretion in the absorption of dietary calcium. 640.
Bolli, G., De Feo, P., Perriello, G., De Cosmo, S., Compagnucci, P., Santeusanio, F., Brunetti, P., and Unger, R. H. Mechanisms of glucagon secretion during insulin-induced hypoglycemia in man. Role of the beta cell and arterial hyperinsulinemia. 917.
Bolli, G. B., Tsalikian, E., Haymond, M. W., Cryer, P. E., and Gerich, J. E. Defective glucose counterregulation after subcutaneous insulin in noninsulin-dependent diabetes mellitus. Paradoxical suppression of glucose utilization and lack of compensatory increase in glucose production, roles of insulin resistance, abnormal neuroendocrine responses, and islet paracrine interactions. 1532.
Bologna, M. L., *See* Knowles, Bologna, Chasis, Marchesi, and Marchesi.
Bolton, W. K., Tucker, F. L., and Sturgill, B. C. New avian model of experimental glomerulonephritis consistent with mediation by cellular immunity. Nonhumorally mediated glomerulonephritis in chickens. 1263.
Bond, M. G., *See* Small, Bond, Waugh, Prack, and Sawyer.
Bonduris, D. N., *See* Galla, Bonduris, Dumbauld, and Luke.
Bongiovanni, K., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Bonner-Weir, S., *See* Permutt, Kakita, Malinas, Karl, Bonner-Weir, Weir, and Giddings.
Bonvini, E., Bougnoux, P., Stevenson, H. C., Miller, P., and Hoffman, T. Activation of the oxidative burst in human monocytes is associated with inhibition of methionine-dependent methylation of neutral lipids and phospholipids. 1629.
Booth, B. E., *See* Portale, Booth, Halloran, and Morris.
Booth, W. J., Berndt, M. C., and Castaldi, P. A. An altered platelet granule glycoprotein in patients with essential thrombocythemia. 291.
Bougnoux, P., *See* Bonvini, Bougnoux, Stevenson, Miller, and Hoffman.
Bowie, L. J., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Boyer, J. L., *See* Gautam, Seligson, Gordon, Seligson, and Boyer.
Bradford, H., *See* Walsh, Bradford, Sinha, Piperno, and Tuszynski.
Bradley, V., *See* Evans, Doelle, Lindner, Bradley, and Rabin.
Bradley, W. G., *See* Sabina, Swain, Olanow, Bradley, Fishbein, DiMauro, and Holmes.
Brass, L. F., and Shattil, S. J. Identification and function of the high affinity binding sites for Ca^{2+} on the surface of platelets. 626.
Braziel, R. M., *See* Cossman, Neckers, Braziel, Trepel, Korsmeyer, and Bakhshi.
Breall, J. A., Rudolph, A. M., and Heymann, M. A. Role of thyroid hormone in postnatal circulatory and metabolic adjustments. 1418.
Brenner, B. M., *See* Dworkin, Hostetter, Rennke, and Brenner.
Brewer, H. B., Jr., *See* Hoeg, Demosky, Schaefer, Starzl, and Brewer.
Brezis, M., Rosen, S., Silva, P., and Epstein, F. H. Selective vulnerability of the medullary thick ascending limb to anoxia in the isolated perfused rat kidney. 182.
Brigham, K. L., *See* Bernard, Lucht, Niedermeyer, Snapper, Ogletree, and Brigham.
Brommage, R., *See* Parfitt, Mathews, Brommage, Jarnagin, and DeLuca.
Brown, L. K., *See* Look, Melvin, Brown, Dockter, Roberson, and Murphy.
Broxmeyer, H. E., Juliano, L., Lu, L., Platzer, E., and Dupont, B. HLA-DR human histocompatibility leukocyte antigens-restricted lymphocyte-monocyte interactions in the release from monocytes of acidic isoferritins that suppress hematopoietic progenitor cells. 939.
Broze, G. J., Jr., and Miletich, J. P. Human protein Z. 933.
Brunetti, P., *See* Bolli, De Feo, Perriello, De Cosmo, Compagnucci, Santeusanio, Brunetti, and Unger.
Buchwald, S., *See* King and Buchwald.
Buckner, C. K., *See* Graziano, Gundersen, Larson, Harley, and Buckner.
Buddrus, D. J., *See* Bo-Linn, Davis, Buddrus, Morawski, Santa Ana, and Fordtran.
Buja, L. M., *See* Muntz, Olson, Lariviere, D'Souza, Mukherjee, Willerson, and Buja.
Burg, M. B., *See* Good and Burg.
Bussolari, S. R., *See* Davies, Dewey, Bussolari, Gordon, and Gimbrone.
Butler, J. P., *See* Filicori, Butler, and Crowley.

C

Callahan, K. S., *See* Harlan, Levine, Callahan, Schwartz, and Harker.
Camerino, G., *See* Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.
Camilleri, J. P., *See* Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Capasso, J. M., *See* Schaible, Ciambrone, Capasso, and Scheuer.
Carey, E. L., Jr., Duff, H. J., Roden, D. M., Primm, R. K., Wilkinson, G. R., Wang, T., Oates, J. A., and Woosley, R. L. Encainide and its metabolites. Comparative effects in man on ventricular arrhythmia and electrocardiographic intervals. 539.
Carlson, B. R., *See* Kovacs, Griffin, Weaver, Carlson, and Wilson.
Carmel, R., and Bernstein, G. S. Transcobalamin II in human seminal plasma. 868.
Carmeliet, P., *See* Van de Werf, Minten, Carmeliet, De Geest, and Kesteloot.
Caron, M. G., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
Castaldi, P. A., *See* Booth, Berndt, and Castaldi.
Cazenave, J.-P., *See* Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.
Chang, C. T.-C., *See* Vehaskari, Chang, Stevens, and Robson.
Chapman, H. A., Jr., Stone, O. L., and Vavrin, Z. Degradation of fibrin and elastin by intact human alveolar macrophages in vitro. Characterization of a plasminogen activator and its role in matrix degradation. 806.
Chari, M. V., *See* Oelberg, Chari, Little, Adcock, and Lester.
Chasis, J. A., *See* Knowles, Bologna, Chasis, Marchesi, and Marchesi.
Chekal, M. A., *See* Mujais, Chekal, Jones, Hayslett, and Katz.
Cherniack, N. S. Sleep apnea and its causes. 1501.
Chiu, A. Y. Y., *See* Lian, Mui, Siddiqui, Chiu, and Chiu.
Chiu, L. L. S., *See* Lian, Mui, Siddiqui, Chiu, and Chiu.
Chute, L. E., *See* Weinstein and Chute.
Ciambrone, G. J., *See* Schaible, Ciambrone, Capasso, and Scheuer.
Cines, D. B., Lyss, A. P., Reber, M., Bina, M., and DeHoratius, R. J. Presence of complement-fixing anti-endothelial cell antibodies in systemic lupus erythematosus. 611.
Clark, M. R., *See* Embury, Clark, Monroy, and Mohandas.
Clark, S. B., *See* Patton, Clark, Fasulo, and Robins.
Clegg, J. B., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Clemens, T. L., *See* Amento, Bhalla, Kurnick, Kradin, Clemens, Holick, Holick, and Krane.
Clutter, W. E., *See* Rosen, Clutter, Berk, Shah, and Cryer.
Cobb, F. R., *See* Mays and Cobb.
Coble, B.-I., *See* Stendahl, Coble, Dahlgren, Hed, and Molin.
Cochrane, C. G., *See* Schraufstätter, Revak, and Cochrane.
Cohen, I. R., *See* Holoshitz, Matitiau, and Cohen.
Cole, D. J., *See* Hesse, Cole, Van Epps, and Williams.
Coller, B. S., Kalomiris, E., Steinberg, M., and Scudder, L. E. Evidence that glycocalicin circulates in normal plasma. 794.
Colman, R. W. Surface-mediated defense reactions. The plasma contact activation system. 1249.
—, *See* de Agostini, Lijnen, Pixley, Colman, and Schapira.

—, *See* Scott, Silver, Schapira, and Colman.
Compagnucci, P., *See* Bolli, De Feo, Perriello, De Cosmo, Compagnucci, Santeusanio, Brunetti, and Unger.
Conboy, J., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Connelly, C., *See* Moxon, Deich, and Connelly.
Connor, W. E., *See* Neuringer, Connor, Van Petten, and Barstad.
Coonley, C. J., *See* Warrell, Bockman, Coonley, Isaacs, and Staszewski.
Cooper, N. R., *See* Mayes, Schreiber, and Cooper.
Corey, L., *See* Ashley and Corey.
Cortas, N., Abras, E., Arnaout, M., Mooradian, A., and Muakasah, S. Energetics of sodium transport in the urinary bladder of the toad. Effect of aldosterone and sodium cyanide. 46.
Corvol, M. T., *See* Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Corvol, P., *See* Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Cossman, J., Neckers, L. M., Braziel, R. M., Trepel, J. B., Korsmeyer, S. J., and Bakhshi, A. In vitro enhancement of immunoglobulin gene expression in chronic lymphocytic leukemia. 587.
Crantz, F. R., *See* Silva, Gordon, Crantz, Leonard, and Larsen.
Crapo, J. D., *See* Turrens, Crapo, and Freeman.
Crawford, D. D., *See* Schafer, Crawford, and Gimbrone.
Crofton, J. T., *See* Kauker, Crofton, Share, and Nasjletti.
Cromwell, O., *See* Sass-Kuhn, Moqbel, Mackay, Cromwell, and Kay.
Cross, G. D., *See* Nicholson, McDougal, Spira, Cross, Jones, and Reinherz.
Crowley, W. F., Jr., *See* Filicori, Butler, and Crowley.
Cryer, P. E., *See* Bolli, Tsalikian, Haymond, Cryer, and Gerich.
—, *See* Rosen, Clutter, Berk, Shah, and Cryer.
Curtiss, L. K., *See* Terkeltaub, Curtiss, Tenner, and Ginsberg.
Cuthbert, J. A., and Lipsky, P. E. Immunoregulation by low density lipoproteins in man. Inhibition of mitogen-induced T lymphocyte proliferation by interference with transferrin metabolism. 992.

D

Dahlgren, C., *See* Stendahl, Coble, Dahlgren, Hed, and Molin.
Dana, N., Todd, R. F., III, Pitt, J., Springer, T. A., and Arnaout, M. A. Deficiency of a surface membrane glycoprotein (Mo1) in man. 153.
Darley, J., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Davidson, D., and Stalcup, S. A. Systemic circulatory adjustments to acute hypoxia and reoxygenation in unanesthetized sheep. Role of renin, angiotensin II, and catecholamine interactions. 317.
Davies, A. O., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
Davies, P. F., Dewey, C. F., Jr., Bussolari, S. R., Gordon, E. J., and Gimbrone, M. A., Jr. Influence of hemodynamic forces on vascular endothelial function. In vitro studies of shear stress and pinocytosis in bovine aortic cells. 1121.
Davies, T. F., Weiss, I., and Gerber, M. A. Influence of methimazole on murine thyroiditis. Evidence for immunosuppression in vivo. 397.
Davignon, J., *See* Milne, Weech, Blanchette, Davignon, Alaupovic, and Marcel.
Davis, G. R., *See* Bo-Linn, Davis, Buddrus, Morawski, Santa Ana, and Fordtran.
de Agostini, A., Lijnen, H. R., Pixley, R. A., Colman, R. W., and Schapira, M. Inactivation of Factor XII active fragment in normal plasma. Predominant role of $C\bar{1}$ inhibitor. 1542.
De Cosmo, S., *See* Bolli, De Feo, Perriello, De Cosmo, Compagnucci, Santeusanio, Brunetti, and Unger.
De Feo, P., *See* Bolli, De Feo, Perriello, De Cosmo, Compagnucci, Santeusanio, Brunetti, and Unger.
De Geest, H., *See* Van de Werf, Minten, Carmeliet, De Geest, and Kesteloot.
De la Salle, H., *See* Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.
De Lean, A., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
Depper, J. M., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
De Seau, V., *See* Tosato, Steinberg, Yarchoan, Heilman, Pike, De Seau, and Blaese.
DeBold, C. R., Sheldon, W. R., DeCherney, G. S., Jackson, R. V., Alexander, A. N., Vale, W., Rivier, J., and Orth, D. N. Arginine vasopressin potentiates adrenocorticotropin release induced by ovine corticotropin-releasing factor. 533.
DeCherney, G. S., *See* DeBold, Sheldon, DeCherney, Jackson, Alexander, Vale, Rivier, and Orth.
DeFronzo, R. A., Thorin, D., Felber, J. P., Simonson, D. C., Thiebaud, D., Jequier, E., and Golay, A. Effect of beta and alpha adrenergic blockade on glucose-induced thermogenesis in man. 633.
—, *See* Simonson, Koivisto, Sherwin, Ferrannini, Hendler, Juhlin-Dannfelt, and DeFronzo.
DeHoratius, R. J., *See* Cines, Lyss, Reber, Bina, and DeHoratius.
Deich, R. A., *See* Moxon, Deich, and Connelly.
DeLuca, H. F., *See* Parfitt, Mathews, Brommage, Jarnagin, and DeLuca.
Demosky, S. J., Jr., *See* Hoeg, Demosky, Schaefer, Starzl, and Brewer.
Deno, D. C., McCafferty, M. H., Saba, T. M., and Blumenstock, F. A. Mechanism of acute depletion of plasma fibronectin following thermal injury in rats. Appearance of a gelatinlike ligand in plasma. 20.
Derby, G., *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Derry, S., Wood, W. G., Pippard, M., Clegg, J. B., Weatherall, D. J., Wickramasinghe, S. N., Darley, J., Fucharoen, S., and Wasi, P. Hematologic and biosynthetic studies in homozygous hemoglobin Constant Spring. 1673.
Devaux, C., *See* Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Devine, D. V., *See* Rosse, Devine, and Ware.
Dewey, C. F., Jr., *See* Davies, Dewey, Bussolari, Gordon, and Gimbrone.
Dharmgrongartama, B., *See* Atlas, Hesson, Sealey, Dharmgrongartama, Laragh, Ruddy, and Aurell.
Dighe, R. R., Rojas, F. J., Birnbaumer, L., and Garber, A. J. Glucagon-stimulable adenylyl cyclase in rat liver. Effects of chronic uremia and intermittent glucagon administration. 1004.
—, **Rojas, F. J., Birnbaumer, L., and Garber, A. J.** Glucagon-stimulable adenylyl cyclase in rat liver. The impact of streptozotocin-induced diabetes mellitus. 1013.
DiMauro, S., *See* Sabina, Swain, Olanow, Bradley, Fishbein, DiMauro, and Holmes.
Dinarello, C. A., *See* Ikejima, Dinarello, Gill, and Wolff.
Distaso, J. A., *See* Morimoto, Reinherz, Distaso, Steinberg, and Schlossman.
Dockter, M. E., *See* Look, Melvin, Brown, Dockter, Roberson, and Murphy.
Doelle, G. C., *See* Evans, Doelle, Lindner, Bradley, and Rabin.
Douglas, J. G., *See* Paller, Douglas, and Linas.
Downs, R. W., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
Drake, T. A., Rodgers, G. M., and Sande, M. A. Tissue factor is a major stimulus for vegetation formation in enterococcal endocarditis in rabbits. 1750.

Drezner, M. K., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
D'Souza, S., *See* Muntz, Olson, Lariviere, D'Souza, Mukherjee, Willerson, and Buja.
Duff, H. J., *See* Carey, Duff, Roden, Primm, Wilkinson, Wang, Oates, and Woosley.
Dumbauld, S. L., *See* Galla, Bonduris, Dumbauld, and Luke.
Dupont, B., *See* Broxmeyer, Juliano, Lu, Platzer, and Dupont.
Durie, C. J., *See* Fleit, Wright, Durie, Valinsky, and Unkeless.
Dutta, S. K., *See* Abrams, Hamosh, Hubbard, Dutta, and Hamosh.
Dworkin, L. D., Hostetter, T. H., Rennke, H. G., and Brenner, B. M. Hemodynamic basis for glomerular injury in rats with desoxycorticosterone-salt hypertension. 1448.

E

Edelman, N. H., *See* Santiago, Guerra, Neubauer, and Edelman.
Ehnholm, C., *See* Weisgraber, Rall, Innerarity, Mahley, Kuusi, and Ehnholm.
Elashoff, J. D., *See* Soll, Amirian, Thomas, Reedy, and Elashoff.
Eldor, A., Fridman, R., Vlodavsky, I., Hy-Am, E., Fuks, Z., and Panet, A. Interferon enhances prostacyclin production by cultured vascular endothelial cells. 251.
Embury, S. H., Clark, M. R., Monroy, G., and Mohandas, N. Concurrent sickle cell anemia and α-thalassemia. Effect on pathological properties of sickle erythrocytes. 251.
—, *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Engel, A. G., *See* Rebouche and Engel.
Engfeldt, P., *See* Arner, Bolinder, Engfeldt, Hellmér, and Östman.
Ensinck, J. W., *See* Taborsky and Ensinck.
Epstein, F. H., *See* Brezis, Rosen, Silva, and Epstein.
Esmon, C. T., *See* Salem, Esmon, Esmon, and Majerus.
Esmon, N. L., *See* Salem, Esmon, Esmon, and Majerus.
Evans, E., Mohandas, N., and Leung, A. Static and dynamic rigidities of normal and sickle erythrocytes. Major influence of cell hemoglobin concentration. 477.
Evans, R. M., Doelle, G. C., Lindner, J., Bradley, V., and Rabin, D. A luteinizing hormone-releasing hormone agonist decreases biological activity and modifies chromatographic behavior of luteinizing hormone in man. 262.
Eysselein, V. E., Maxwell, V., Reedy, T., Wünsch, E., and Walsh, J. H. Similar acid stimulatory potencies of synthetic human big and little gastrins in man. 1284.
—, *See* Kleibeuker, Eysselein, Maxwell, and Walsh.

F

Fanger, M. W., *See* Ball, Guyre, Shen, Glynn, Maliszewski, Baker, and Fanger.
Fasulo, J. M., *See* Patton, Clark, Fasulo, and Robins.
Fauci, A. S., *See* Nutman, Ottesen, Fauci, and Volkman.
Felber, J. P., *See* DeFronzo, Thorin, Felber, Simonson, Thiebaud, Jequier, and Golay.
Feldman, M., *See* Thirlby and Feldman.
Feldman, R. D., Limbird, L. E., Nadeau, J., Robertson, D., and Wood, A. J. J. Leukocyte β-receptor alterations in hypertensive subjects. 648.
Felig, P., *See* Wahren, Sato, Östman, Hagenfeldt, and Felig.
Ferrannini, E., *See* Simonson, Koivisto, Sherwin, Ferrannini, Hendler, Juhlin-Dannfelt, and DeFronzo.
Fialkow, P. J., *See* Abkowitz, Fialkow, Niebrugge, Raskind, and Adamson.
Filicori, M., Butler, J. P., and Crowley, W. F., Jr. Neuroendocrine regulation of the corpus luteum in the human. Evidence for pulsatile progesterone secretion. 1638.
Fink, R., *See* Revers, Fink, Griffin, Olefsky, and Kolterman.
Fishbein, W. N., *See* Sabina, Swain, Olanow, Bradley, Fishbein, DiMauro, and Holmes.
Fleit, H. B., Wright, S. D., Durie, C. J., Valinsky, J. E., and Unkeless, J. C. Ontogeny of Fc receptors and complement receptor (CR3) during human myeloid differentiation. 516.
Foley, J. E., *See* Bogardus, Lillioja, Mott, Reaven, Kashiwagi, and Foley.
Fordtran, J. S., *See* Bc-Linn, Davis, Buddrus, Morawski, Santa Ana, and Fordtran.
Freeman, B. A., *See* Turrens, Crapo, and Freeman.
Fridman, R., *See* Eldor, Fridman, Vlodavsky, Hy-Am, Fuks, and Panet.
Friedman, S., *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Frohman, L. A., Thominet, J. L., Webb, C. B., Vance, M. L., Uderman, H., Rivier, J., Vale, W., and Thorner, M. O. Metabolic clearance and plasma disappearance rates of human pancreatic tumor growth hormone releasing factor in man. 1304.
Frommer, J. P., Laski, M. E., Wesson, D. E., and Kurtzman, N. A. Internephron heterogeneity for carbonic anhydrase-independent bicarbonate reabsorption in the rat. 1034.
Fucharoen, S., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Fuchs, H. E., Trapp, H. G., Griffith, M. J., Roberts, H. R., and Pizzo, S. V. Regulation of Factor IX_a in vitro in human and mouse plasma and in vivo in the mouse. Role of the endothelium and plasma proteinase inhibitors. 1696.
Fuks, Z., *See* Eldor, Fridman, Vlodavsky, Hy-Am, Fuks, and Panet.
Funder, J. W., *See* Lolait, Lim, Toh, and Funder.

G

Gabbiani, G., Kocher, O., Bloom, W. S., Vandekerckhove, J., and Weber, K. Actin expression in smooth muscle cells of rat aortic intimal thickening, human atheromatous plaque, and cultured rat aortic media. 148.
Gabig, T. G., and Lefker, B. A. Deficient flavoprotein component of the NADPH-dependent O_2^--generating oxidase in the neutrophils from three male patients with chronic granulomatousdisease. 701.
Gale, R. P., *See* Kodo, Gale, and Saxon.
Galen, F. X., Devaux, C., Houot, A. M., Menard, J., Corvol, P., Corvol, M. T., Gubler, M. C., Mounier, F., and Camilleri, J. P. Renin biosynthesis by human tumoral juxtaglomerular cells. 1144.
Galla, J. H., Bonduris, D. N., Dumbauld, S. L., and Luke, R. G. Segmental chloride and fluid handling during correction of chloride-depletion alkalosis without volume expansion in the rat. 96.
Gallo, R. C., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Garber, A. J., *See* Dighe, Rojas, Birnbaumer, and Garber.
—, *See* Dighe, Rojas, Birnbaumer, and Garber.
Gautam, A., Seligson, H., Gordon, E. R., Seligson, D., and Boyer, J. L. Irreversible binding of conjugated bilirubin to albumin in cholestatic rats. 873.
Gelfand, E. W., *See* Ha, Minden, Hozumi, and Gelfand.
Gerber, M. A., *See* Davies, Weiss, and Gerber.
Gerich, J. E., *See* Bolli, Tsalikian, Haymond, Cryer, and Gerich.
—, *See* Simmons, Miles, Gerich, and Haymond.
Gershwin, M. E., *See* Haynes and Gershwin.
Gery, I., *See* Schmidt, Oliver, Lepe-Zuniga, Green, and Gery.

Giddings, S. J., *See* Permutt, Kakita, Malinas, Karl, Bonner-Weir, Weir, and Giddings.
Gill, D. M., *See* Ikejima, Dinarello, Gill, and Wolff.
Gilligan, J., *See* Goodman, Gilligan, and Horst.
Gilman, A. G. Guanine nucleotide-binding regulatory proteins and dual control of adenylate cyclase. 1.
Gimbrone, M. A., Jr., *See* Davies, Dewey, Bussolari, Gordon, and Gimbrone.
—, *See* Schafer, Crawford, and Gimbrone.
Ginsberg, M. H., *See* Terkeltaub, Curtiss, Tenner, and Ginsberg.
Glowacki, J., *See* Lian, Tassinari, and Glowacki.
Gluck, S., and Al-Awqati, Q. An electrogenic proton-translocating adenosine triphosphatase from bovine kidney medulla. 1704.
Glynn, J. M., *See* Ball, Guyre, Shen, Glynn, Maliszewski, Baker, and Fanger.
Golay, A., *See* DeFronzo, Thorin, Felber, Simonson, Thiebaud, Jequier, and Golay.
Golbetz, H., *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Goldman, C. K., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Goldman, S., Olajos, M., and Morkin, E. Control of cardiac output in thyrotoxic calves. Evaluation of changes in the systemic circulation. 358.
Goldstick, T. K., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Good, D. W., and Burg, M. B. Ammonia production by individual segments of the rat nephron. 602.
Goodman, W. G., Gilligan, J., and Horst, R. Short-term aluminum administration in the rat. Effects on bone formation and relationship to renal osteomalacia. 171.
Gordon, E. J., *See* Davies, Dewey, Bussolari, Gordon, and Gimbrone.
Gordon, E. R., *See* Gautam, Seligson, Gordon, Seligson, and Boyer.
Gordon, M. B., *See* Silva, Gordon, Crantz, Leonard, and Larsen.
Graziano, F. M., Gundersen, L., Larson, L. A., Harley, P., and Buckner, C. K. Receptor-specific mediation by immunoglobulin E of antigen-induced contraction of tracheal and lung parenchymal strips isolated from the guinea pig. 1215.
Green, I., *See* Schmidt, Oliver, Lepe-Zuniga, Green, and Gery.
Greene, W. C., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Greenlee, R., *See* Gurewich, Pannell, Louie, Kelley, Suddith, and Greenlee.
Griffin, J., *See* Revers, Fink, Griffin, Olefsky, and Kolterman.
Griffin, J. E., *See* Kovacs, Griffin, Weaver, Carlson, and Wilson.
Griffith, M. J., *See* Fuchs, Trapp, Griffith, Roberts, and Pizzo.
Grundy, S. M., Lan, S.-P., Lachin, J., Baum, R. A., Habig, R. L., Hanson, R. F., Hersh, T., Hightower, N. C., Hofmann, A. F., Lasser, E. C., Marks, J. W., Mekhjian, H., Okun, R., Schaefer, R. A., Schoenfield, L. J., Shaw, L. Soloway, R. D., Thistle, J. L., Thomas, F. P., and Tyor, M. P. The effects of chenodiol on biliary lipids and their association with gallstone dissolution in the National Cooperative Gallstone Study (NCGS). 1156.
Grunebaum, L., Cazenave, J.-P., Camerino, G., Kloepfer, C., Mandel, J.-L., Tolstoshev, P., Jaye, M., De la Salle, H., and Lococq, J.-P. Carrier detection of hemophilia B by using a restriction site polymorphism associated with the coagulation Factor IX gene. 1491.
Gubler, M. C., *See* Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Guerra, E., *See* Santiago, Guerra, Neubauer, and Edelman.
Guerry, D., IV, Alexander, M. A., Herlyn, M. F., Zehngebot, L. M., Mitchell, K. F., Zmijewski, C. M., and Lusk, E. J. Human histocompatibility leukocyte antigens HLA-DR permit cultured human melanoma cells from early but not advanced disease to stimulate autologous lymphocytes. 267.
Guis, M., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Gundersen, L., *See* Graziano, Gundersen, Larson, Harley, and Buckner.
Gurewich, V., Pannell, R., Louie, S., Kelley, P., Suddith, R. L., and Greenlee, R. Effective and fibrin-specific clot lysis by a zymogen precursor form of urokinase (pro-urokinase). A study in vitro and in two animal species. 1731.
Gutsche, H. U., Peterson, L. N., and Levine, D. Z. In vivo evidence of impaired solute transport by the thick ascending limb in potassium-depleted rats. 908.
Guyre, P. M., *See* Ball, Guyre, Shen, Glynn, Maliszewski, Baker, and Fanger.

H

Ha, K., Minden, M., Hozumi, N., and Gelfand, E. W. Immunoglobulin μ-chain gene rearrangement in a patient with T cell acute lymphoblastic leukemia. 1232.
Haas, J. E., *See* Jacobs, Locksley, Wilson, Haas, and Klebanoff.
—, *See* Wilson and Haas.
Habig, R. L., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Hagege, J., *See* Schlondorff, Satriano, Hagege, Perez, and Baud.
Hagenfeldt, L., *See* Wahren, Sato, Östman, Hagenfeldt, and Felig.
Halloran, B. P., *See* Portale, Booth, Halloran, and Morris.
Hamosh, M., *See* Abrams, Hamosh, Hubbard, Dutta, and Hamosh.
Hamosh, P., *See* Abrams, Hamosh, Hubbard, Dutta, and Hamosh.
Hanley, W. B., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.
Hanson, R. F., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Harker, L. A., *See* Harlan, Levine, Callahan, Schwartz, and Harker.
Harlan, J. M., Levine, J. D., Callahan, K. S., Schwartz, B. R., and Harker, L. A. Glutathione redox cycle protects cultured endothelial cells against lysis by extracellularly generated hydrogen peroxide. 706.
Harley, P., *See* Graziano, Gundersen, Larson, Harley, and Buckner.
Harpel, P. C., *See* Leung, Nachman, and Harpel.
Hartman, M., *See* Lange, Hartman, and Sobel.
Haymond, M. W., *See* Bolli, Tsalikian, Haymond, Cryer, and Gerich.
—, *See* Simmons, Miles, Gerich, and Haymond.
Haynes, D. C., and Gershwin, M. E. Diversity of autoantibodies in avian scleroderma. An inherited fibrotic disease of White Leghorn chickens. 1557.
Hayslett, J. P., *See* Mujais, Chekal, Jones, Hayslett, and Katz.
Heath, H., III, *See* Tsai, Heath, Kumar, and Riggs.
Hed, J., *See* Stendahl, Coble, Dahlgren, Hed, and Molin.
Heilman, C. A., *See* Tosato, Steinberg, Yarchoan, Heilman, Pike, De Seau, and Blaese.
Heinsimer, J. A., Davies, A. O., Downs, R. W., Levine, M. A., Spiegel, A. M., Drezner, M. K., De Lean, A., Wreggett, K. A., Caron, M. G., and Lefkowitz, R. J. Impaired formation of β-adrenergic receptor-nucleotide regulatory protein complexes in pseudohypoparathyroidism. 1335.
Hellmér, J., *See* Arner, Bolinder, Engfeldt, Hellmér, and Östman.
Hendler, R., *See* Simonson, Koivisto, Sherwin, Ferrannini, Hendler, Juhlin-Dannfelt, and DeFronzo.

Herlyn, M. F., *See* Guerry, Alexander, Herlyn, Zehngebot, Mitchell, Zmijewski, and Lusk.
Hermann, R. E., *See* Holzbach, Kibe, Thiel, Howell, Marsh, and Hermann.
Hersh, T., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Hesse, D. G., Cole, D. J., Van Epps, D. E., and Williams, R. C., Jr. Decreased T lymphocyte migration in patients with malignancy mediated by a suppressor cell population. 1078.
Hesson, T. E., *See* Atlas, Hesson, Sealey, Dharmgrongartama, Laragh, Ruddy, and Aurell.
Heymann, M. A., *See* Breall, Rudolph, and Heymann.
Hightower, N. C., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Hirata, R. K., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Hlastala, M. P., *See* Ralph, Ott, Sherrard, and Hlastala.
Hoeg, J. M., Demosky, S. J., Jr., Schaefer, E. J., Starzl, T. E., and Brewer, H. B., Jr. Characterization of hepatic low density lipoprotein binding and cholesterol metabolism in normal and homozygous familial hypercholesterolemic subjects. 429.
Hoekstra, W. P. M., *See* Rozenberg-Arska, van Strijp, Hoekstra, and Verhoef.
Hoffer, L. J., Bistrian, B. R., Young, V. R., Blackburn, G. L., and Matthews, D. E. Metabolic effects of very low calorie weight reduction diets. 750.
Hoffman, T., *See* Bonvini, Bougnoux, Stevenson, Miller, and Hoffman.
Hofmann, A. F., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Holbein, B. E., *See Lalonde and Holbein.*
Holick, M. F., *See* Amento, Bhalla, Kurnick, Kradin, Clemens, Holick, Holick, and Krane.
Holick, S. A., *See* Amento, Bhalla, Kurnick, Kradin, Clemens, Holick, Holick, and Krane.
Holmes, E. W., *See* Sabina, Swain, Olanow, Bradley, Fishbein, DiMauro, and Holmes.
Holoshitz, J., Matitiau, A., and Cohen, I. R. *Arthritis induced in rats* by cloned T lymphocytes responsive to mycobacteria but not to collagen type II. 211.
Holzbach, R. T., Kibe, A., Thiel, E., Howell, J. H., Marsh, M., and Hermann, R. E. Biliary proteins. Unique inhibitors of cholesterol crystal nucleation in human gallbladder bile. 35.
Homcy, C. J., *See* Vatner, Homcy, Sit, Manders. W. T., and Vatner.
Honig, G. R., Shamsuddin, M., Vida, L. N., Mompoint, M., Valcourt, E., Bowie, L. J., Jones, E. C., Powers, P. A., Spritz, R. A., Guis, M., Embury, S. H., Conboy, J., Kan, Y. W., Mentzer, W. C., Weil, S. C., Hirata, R. K., Waloch, J., O'Riordan, J. F., and Goldstick, T. K. Hemoglobin Evanston (α14 Trp→Arg). An unstable α-chain variant expressed as α-thalassemia. 1740.
Hoppel, C. L., *See* Roe, Millington, Maltby, Bohan, and Hoppel.
Horst, R., *See* Goodman, Gilligan, and Horst.
Horst, R. L., *See* Schedl, Miller, Pape, Horst, and Wilson.
Hostetter, T. H., *See* Dworkin, Hostetter, Rennke, and Brenner.
Houot, A. M., *See* Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Houwertjes, M. C., *See Agoston, Maestrone, van Hezik, Ket, Houwertjes,* and Uges.
Howell, J. H., *See* Holzbach, Kibe, Thiel, Howell, Marsh, and Hermann.
Hozumi, N., *See* Ha, Minden, Hozumi, and Gelfand.
Hubbard, V. S., *See* Abrams, Hamosh, Hubbard, Dutta, and Hamosh.
Hughes, H., *See Lauterburg, Smith, Hughes, and Mitchell.*
Humes, H. D., Sastrasinh, M., and Weinberg, J. M. Calcium is a competitive inhibitor of gentamicin-renal membrane binding interactions and dietary calcium supplementation protects against gentamicin nephrotoxicity. 134.
Humphries, R. K., *See* Young, Mortimer, Moore, and Humphries.
Hy-Am, E., *See* Eldor, Fridman, Vlodavsky, Hy-Am, Fuks, and Panet.
Hyman, D. B., and Tanaka, K. Specific glutaryl-CoA dehydrogenating activity is deficient in cultured fibroblasts from glutaric aciduria patients. 778.

I

Ikegami, M., *See* Jobe, Ikegami, Jacobs, and Jones.
Ikejima, T., Dinarello, C. A., Gill, D. M., and Wolff, S. M. Induction of human interleukin-l by a product of *Staphylococcus aureus* associated with toxic shock syndrome. 1312.
Innerarity, T. L., *See* Weisgraber, Rall, Innerarity, Mahley, Kuusi, and Ehnholm.
Inoue, M., Kinne, R., Tran, T., and Arias, I. M. Taurocholate transport by rat liver canalicular membrane vesicles. Evidence for the presence of an Na^+-independent transport system. 659.
Isaacs, M., *See* Warrell, Bockman, Coonley, Isaacs, and Staszewski.
Ishibashi, M., and Yamaji, T. Direct effects of catecholamines, thyrotropin-releasing hormone, and somatostatin on growth hormone and prolactin secretion from adenomatous and nonadenomatous human pituitary cells in culture. 66.
Ives, H. E., and Rector, F. C., Jr. Proton transport and cell function. 285.

J

Jackson, R. V., *See* DeBold, Sheldon, DeCherney, Jackson, Alexander, Vale, Rivier, and Orth.
Jacobs, H., *See* Jobe, Ikegami, Jacobs, and Jones.
Jacobs, R. F., Locksley, R. M., Wilson, C. B., Haas, J. E., and Klebanoff, S. J. Interaction of primate alveolar macrophages and *Legionella pneumophila.* 1515.
Jacobson, H. R., *See* Schuster, Kokko, and Jacobson.
—, *See* Schuster, Kokko, and Jacobson.
Jarnagin, K., *See* Parfitt, Mathews, Brommage, Jarnagin, and DeLuca.
Jaye, M., *See* Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.
Jequier, E., *See* DeFronzo, Thorin, Felber, Simonson, Thiebaud, Jequier, and Golay.
Jobe, A., Ikegami, M., Jacobs, H., and Jones, S. Surfactant and pulmonary blood flow distributions following treatment of premature lambs with natural surfactant. 848.
Johnson, H. M., *See* Sztein, Steeg, Johnson, and Oppenheim.
Jones, B. M., *See* Nicholson, McDougal, Spira, Cross, Jones, and Reinherz.
Jones, E. C., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Jones, S., *See* Jobe, Ikegami, Jacobs, and Jones.
Jones, W. J., *See* Mujais, Chekal, Jones, Hayslett, and Katz.
Jordan, J., *See* Schullek, Jordan, and Montgomery.
Juhlin-Dannfelt, A., *See* Simonson, Koivisto, Sherwin, Ferrannini, Hendler, Juhlin-Dannfelt, and DeFronzo.
Juliano, L., *See* Broxmeyer, Juliano, Lu, Platzer, and Dupont.

K

Kadowaki, S., and Norman, A. W. Dietary vitamin D is essential for normal insulin secretion from the perfused rat pancreas. 759.

Kahane, I., *See* Almagor, Kahane, and Yatziv.

Kahn, A. J., *See* Bar-Shavit, Kahn, Pegg, Stone, and Teitelbaum.

Kakinuma, K., *See* Kitagawa, Ohta, Nojiri, Kakinuma, Saito, Takaku, and Miura.

Kakita, K., *See* Permutt, Kakita, Malinas, Karl, Bonner-Weir, Weir, and Giddings.

Kalomiris, E., *See* Coller, Kalomiris, Steinberg, and Scudder.

Kan, Y. W., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.

Kapatos, G., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.

Kaptein, E. M., *See* Lum, Nicoloff, Spencer, and Kaptein.

Karl, I., *See* Permutt, Kakita, Malinas, Karl, Bonner-Weir, Weir, and Giddings.

Kashiwagi, A., *See* Bogardus, Lillioja, Mott, Reaven, Kashiwagi, and Foley.

Katz, A. I., *See* Mujais, Chekal, Jones, Hayslett, and Katz.

Kaufman, S., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.

Kauker, M. L., Crofton, J. T., Share, L., and Nasjletti, A. Role of vasopressin in regulation of renal kinin excretion in Long-Evans and diabetes insipidus rats. 824.

Kay, A. B., *See* Sass-Kuhn, Moqbel, Mackay, Cromwell, and Kay.

Kaysen, G. A., *See* Zern, Yap, Strair, Kaysen, and Shafritz.

Kelley, P., *See* Gurewich, Pannell, Louie, Kelley, Suddith, and Greenlee.

Ket, J. M., *See* Agoston, Maestrone, van Hezik, Ket, Houwertjes, and Uges.

Kibe, A., *See* Holzbach, Kibe, Thiel, Howell, Marsh, and Hermann.

King, G. L., and Buchwald, S. Characterization and partial purification of an endothelial cell growth factor from human platelets. 392.

Kinne, R., *See* Inoue, Kinne, Tran, and Arias.

Kitagawa, S., Ohta, M., Nojiri, H., Kakinuma, K., Saito, M., Takaku, F., and Miura, Y. Functional maturation of membrane potential changes and superoxide-producing capacity during differentiation of human granulocytes. 1062.

Klebanoff, S. J., *See* Jacobs, Locksley, Wilson, Haas, and Klebanoff.

Kleibeuker, J. H., Eysselein, V. E., Maxwell, V. E., and Walsh, J. H. Role of endogenous secretin in acid-induced inhibition of human gastric function. 526.

Kloepfer, C., *See* Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.

Knight, L. C., *See* Sinha, Seaman, Koshy, Knight, and Walsh.

Knowles, W. J., Bologna, M. L., Chasis, J. A., Marchesi, S. L., and Marchesi, V. T. Common structural polymorphisms in human erythrocyte spectrin. 973.

Kocher, O., *See* Gabbiani, Kocher, Bloom, Vandekerckhove, and Weber.

Kodo, H., Gale, R. P., and Saxon, A. Antibody synthesis by bone marrow cells in vitro following primary and booster tetanus toxoid immunization in humans. 1377.

Koivisto, V., *See* Simonson, Koivisto, Sherwin, Ferrannini, Hendler, Juhlin-Dannfelt, and DeFronzo.

Kokko, J. P., *See* Schuster, Kokko, and Jacobson.

—, *See* Schuster, Kokko, and Jacobson.

Kolterman, O. G., *See* Revers, Fink, Griffin, Olefsky, and Kolterman.

Korsmeyer, S. J., *See* Cossman, Neckers, Braziel, Trepel, Korsmeyer, and Bakhshi.

Koshy, A., *See* Sinha, Seaman, Koshy, Knight, and Walsh.

Koster, J. F., *See* Biemond, van Eijk, Swaak, and Koster.

Kovacs, W. J., Griffin, J. E., Weaver, D. D., Carlson, B. R., and Wilson, J. D. A mutation that causes lability of the androgen receptor under conditions that normally promote transformation to the DNA-binding state. 1095.

Kradin, R. L., *See* Amento, Bhalla, Kurnick, Kradin, Clemens, Holick, Holick, and Krane.

Krane, S. M., *See* Amento, Bhalla, Kurnick, Kradin, Clemens, Holick, Holick, and Krane.

Krothapalli, R. K., and Suki, W. N. Functional characterization of the alpha adrenergic receptor modulating the hydroosmotic effect of vasopressin on the rabbit cortical collecting tubule. 740.

Kuhn, L. J., *See* Vandenbark, Kuhn, and Niedel.

Kumar, R., *See* Tsai, Heath, Kumar, and Riggs.

Kurnick, J. T., *See* Amento, Bhalla, Kurnick, Kradin, Clemens, Holick, Holick, and Krane.

Kurtzman, N. A., *See* Frommer, Laski, Wesson, and Kurtzman.

Kuusi, T., *See* Weisgraber, Rall, Innerarity, Mahley, Kuusi, and Ehnholm.

L

Lachin, J., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.

Lacy, W. W., *See* Radosevich, Williams, McRae, Lacy, Orth, and Abumrad.

Lagast, H., Lew, P. D., and Waldvogel, F. A. Adenosine triphosphate-dependent calcium pump in the plasma membrane of guinea pig and human neutrophils. 107.

—, Pozzan, T., Waldvogel, F. A., and Lew, P. D. Phorbol myristate acetate stimulates ATP-dependent calcium transport by the plasma membrane of neutrophils. 878.

Lalonde, R. G., and Holbein, B. E. Role of iron in *Trypanosoma cruzi* infection of mice. 470.

Lan, S.-P., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.

Lange, L. G., Hartman, M., and Sobel, B. E. Oxygen at physiological concentrations. A potential, paradoxical mediator of reperfusion injury to mitochondria induced by phosphate. 1046.

Laragh, J. H., *See* Atlas, Hesson, Sealey, Dharmgrongartama, Laragh, Ruddy, and Aurell.

Lariviere, G. R., *See* Muntz, Olson, Lariviere, D'Souza, Mukherjee, Willerson, and Buja.

Larsen, P. R., *See* Silva, Gordon, Crantz, Leonard, and Larsen.

Larson, L. A., *See* Graziano, Gundersen, Larson, Harley, and Buckner.

Laski, M. E., *See* Frommer, Laski, Wesson, and Kurtzman.

Lasser, E. C., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.

Lauterburg, B. H., Smith, C. V., Hughes, H., and Mitchell, J. R. Biliary excretion of glutatione and glutatione disulfide in the rat. Regulation and response to oxidative stress. 124.

Lawler, J., Liu, S.-C., Palek, J., and Prchal, J. A molecular defect of spectrin in a subset of patients with hereditary elliptocytosis. Alterations in the α-subunit domain involved in spectrin self-association. 1688.

Lee, T.-K., *See* Rothberger, McGee, and Lee.

Lefker, B. A., *See* Gabig and Lefker.

Lefkowitz, R. J., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.

Leo, M. A., and Lieber, C. S. Normal testicular structure and reproductive function in deermice lacking retinol and alcohol dehydrogenase activity. 593.

Leonard, J. L., *See* Silva, Gordon, Crantz, Leonard, and Larsen.

Leonard, W., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.

Lepe-Zuniga, J. L., *See* Schmidt, Oliver, Lepe-Zuniga, Green, and Gery.
Lester, R., See Oelberg, Chari, Little, Adcock, and Lester.
Leung, A., *See* Evans, Mohandas, and Leung.
Leung, L. L. K., Nachman, R. L., and Harpel, P. C. Complex formation of platelet thrombospondin with histidine-rich glycoprotein. 5.
Levine, D. Z., See Gutsche, Peterson, and Levine.
Levine, J. D., See Harlan, Levine, Callahan, Schwartz, and Harker.
Levine, M. A., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
Lew, P. D., See Lagast, Lew, and Waldvogel.
—, *See* Lagast, Pozzan, Waldvogel, and Lew.
—, See Zimmerli, Lew, and Waldvogel.
Lewis, R. A., and Austen, K. F. The biologically active leukotrienes. Biosynthesis, metabolism, receptors, functions, and pharmacology. 889.
Lian, E. C.-Y., Mui, P. T. K., Siddiqui, F. A., Chiu, A. Y. Y., and Chiu, L. L. S. *Inhibition of platelet-aggregating activity in thrombotic* thrombocytopenic purpura plasma by normal adult immunoglobulin G. 548.
Lian, J. B., Tassinari, M., and Glowacki, J. Resorption of implanted bone prepared from normal annd warfarin-treated rats. 1223.
Lieber, C. S., See Leo and Lieber.
Lijnen, H. R., *See* de Agostini, Lijnen, Pixley, Colman, and Schapira.
Lillioja, S., *See* Bogardus, Lillioja, Mott, Reaven, Kashiwagi, and Foley.
—, *See* Bogardus, Lillioja, Stone, and Mott.
Lim, A. T. W., See Lolait, Lim, Toh, and Funder.
Limbird, L. E., See Feldman, Limbird, Nadeau, Robertson, and Wood.
Linas, S. L., *See* Paller, Douglas, and Linas.
Lindheimer, M. D., *See* Barron, Stamoutsos, and Lindheimer.
Lindner, J., See Evans, Doelle, Lindner, Bradley, and Rabin.
Lipsky, P. E. Immunosuppression by D-penicillamine in vitro. Inhibition *of human T lymphocyte proliferation by copper- or ceruloplasmin-*dependent generation of hydrogen peroxide and protection by monocytes. 53.
—, *See* Cuthbert and Lipsky.
Little, J. M., See Oelberg, Chari, Little, Adcock, and Lester.
Liu, S.-C., See Lawler, Liu, Palek, and Prchal.
Locksley, R. M., *See* Jacobs, Locksley, Wilson, Haas, and Klebanoff.
Lococq, J.-P., *See* Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.
Lolait, S. J., Lim, A. T. W., Toh, B. H., and Funder, J. W. Immu*noreactive β-endorphin in a subpopulation of mouse spleen mac*rophages. 277.
Look, A. T., Melvin, S. L., Brown, L. K., Dockter, M. E., Roberson, P. K., and Murphy, S. B. Quantitative variation of the common acute lymphoblastic leukemia antigen (gp100) on leukemic marrow *blasts. 1617.*
Louie, S., *See* Gurewich, Pannell, Louie, Kelley, Suddith, and Geenlee.
Lu, L., *See* Broxmeyer, Juliano, Lu, Platzer, and Dupont.
Luby, J. P., *See* Mackowiak, Marling-Cason, Smith, and Luby.
Lucht, W. D., *See* Bernard, Lucht, Niedermeyer, Snapper, Ogletree, *and Brigham.*
Luke, R. G., *See* Galla, Bonduris, Dumbauld, and Luke.
Lum, S. M. C., Nicoloff, J. T., Spencer, C. A., and Kaptein, E. M. Peripheral tissue mechanism for maintenance of serum triiodothyronine values in a thyroxine-deficient state in man. 570.
*Lusk, E. J., See Guerry, Alexander, Herlyn, Zehngebot, Mitchell, Zmi*jewski, and Lusk.
Lyss, A. P., *See* Cines, Lyss, Reber, Bina, and DeHoratius.

M

Maack, T., See Park and Maack.
MacGregor, D., See McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.
Mackay, J. A., *See* Sass-Kuhn, Moqbel, Mackay, Cromwell, and Kay.
Mackowiak, P. A., Marling-Cason, M., Smith, J. W., and Luby, J. P. Antibody-mediated bacterial adhesion to cytomegalovirus-induced *Fc receptors. Potential relationship to secondary infections com*plicating herpesvirus infections. 987.
Maestrone, E., *See* Agoston, Maestrone, van Hezik, Ket, Houwertjes, and Uges.
Mahley, R. W., *See* Weisgraber, Rall, Innerarity, Mahley, Kuusi, and *Ehnholm.*
Majerus, P. W., *See* Salem, Esmon, Esmon, and Majerus.
—, *See* Wilson, Salem, Mruk, Maruyama, and Majerus.
Malinas, P., See Permutt, Kakita, Malinas, Karl, Bonner-Weir, Weir, and Giddings.
Maliszewski, C. R., See Ball, Guyre, Shen, Glynn, Maliszewski, Baker, and Fanger.
Maltby, D. A., *See* Roe, Millington, Maltby, Bohan, and Hoppel.
Mandel, J.-L., See Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.
Manders. W. T., See Vatner, Homcy, Sit, Manders. W. T., and Vatner.
Marcel, Y. L., *See* Milne, Weech, Blanchette, Davignon, Alaupovic, and Marcel.
Marchesi, S. L., See Knowles, Bologna, Chasis, Marchesi, and Marchesi.
Marchesi, V. T., See Knowles, Bologna, Chasis, Marchesi, and Marchesi.
Marks, J. W., *See Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh,* Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Marling-Cason, M., See Mackowiak, Marling-Cason, Smith, and Luby.
Marsh, M., See Holzbach, Kibe, Thiel, Howell, Marsh, and Hermann.
Maruyama, I., See Wilson, Salem, Mruk, Maruyama, and Majerus.
Mathews, C. H. E., *See* Parfitt, Mathews, Brommage, Jarnagin, and DeLuca.
Matitiau, A., See Holoshitz, Matitiau, and Cohen.
Matthews, D. E., See Hoffer, Bistrian, Young, Blackburn, and Matthews.
Maxwell, V., See Eysselein, Maxwell, Reedy, Wünsch, and Walsh.
Maxwell, V. E., *See* Kleibeuker, Eysselein, Maxwell, and Walsh.
Mayes, J. T., Schreiber, R. D., and Cooper, N. R. Development and application of an enzyme-linked immunosorbent assay for the quantitation of alternative complement pathway activation in hu*man serum. 160.*
Mays, A. E., Jr., and Cobb, F. R. Relationship between regional myocardial blood flow and thallium-201 distribution in the presence of coronary artery stenosis and dipyridamole-induced vasodilation. 1359.
McCafferty, M. H., See Deno, McCafferty, Saba, and Blumenstock.
McDougal, J. S., *See* Nicholson, McDougal, Spira, Cross, Jones, and Reinherz.
McGee, M. P., See Rothberger, McGee, and Lee.
McInnes, R. R., Kaufman, S., Warsh, J. J., Van Loon, G. R., Milstien, S., Kapatos, G., Soldin, S., Walsh, P., MacGregor, D., and Hanley, W. B. Biopterin synthesis defect. Treatment with L-dopa and 5-hydroxytryptophan compared with therapy with a tetrahydropterin. *458.*
McRae, J. R., *See* Radosevich, Williams, McRae, Lacy, Orth, and Abumrad.
Mehigan, J. T., *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Mekhjian, H., See Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, *Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.*
Melmed, S. Insulin suppresses growth hormone secretion by rat pituitary cells. 1425.
Melvin, S. L., *See* Look, Melvin, Brown, Dockter, Roberson, and Murphy.
Menard, J., See Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Mentzer, W. C., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.

Miles, J. M., *See* Simmons, Miles, Gerich, and Haymond.
Miletich, J. P., *See Broze and Miletich.*
Miller, D. C., *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Miller, D. L., *See* Schedl, Miller, Pape, Horst, and Wilson.
Miller, E. J., *See* Petrovic and Miller.
Miller, P., *See Bonvini, Bougnoux, Stevenson, Miller, and Hoffman.*
Millington, D. S., *See* Roe, Millington, Maltby, Bohan, and Hoppel.
Milne, R. W., Weech, P. K., Blanchette, L., Davignon, J., Alaupovic, P., and Marcel, Y. L. Isolation and characterization of apolipoprotein B-48 and B-100 very low density lipoproteins from type *III hyperlipoproteinemic subjects. 816.*
Milstien, S., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.
Minden, M., *See* Ha, Minden, Hozumi, and Gelfand.
Mink, S. N. Expiratory flow limitation and the response to breathing *a helium-oxygen gas mixture in a canine model of pulmonary* emphysema. 1321.
Minten, J., *See Van de Werf, Minten, Carmeliet, De Geest, and Kesteloot.*
Mitchell, J. R., *See* Lauterburg, Smith, Hughes, and Mitchell.
Mitchell, K. F., *See* Guerry, Alexander, Herlyn, Zehngebot, Mitchell, *Zmijewski, and Lusk.*
Mitchell, M. C., Schenker, S., and Speeg, K. V., Jr. Selective inhibition *of acetaminophen oxidation and toxicity by cimetidine and other* histamine H_2-receptor antagonists in vivo and in vitro in the rat and in man. 383.
Miura, Y., *See Kitagawa, Ohta, Nojiri, Kakinuma, Saito, Takaku, and* Miura.
Mohandas, N., *See Embury, Clark, Monroy, and Mohandas.*
—, *See* Evans, Mohandas, and Leung.
Molin, L., *See* Stendahl, Coble, Dahlgren, Hed, and Molin.
Mompoint, M., *See Honig, Shamsuddin, Vida, Mompoint, Valcourt,* Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, *Weil, Hirata, Waloch, O'Riordan, and Goldstick.*
Monroy, G., *See* Embury, Clark, Monroy, and Mohandas.
Montgomery, R. R., *See* Schullek, Jordan, and Montgomery.
Mooradian, A., *See Cortas, Abras, Arnaout, Mooradian, and Muakasah.*
Moore, J. G., *See* Young, Mortimer, Moore, and Humphries.
Moqbel, R., *See Sass-Kuhn, Moqbel, Mackay, Cromwell, and Kay.*
Morawski, S. G., *See* Bo-Linn, Davis, Buddrus, Morawski, Santa Ana, and Fordtran.
Morimoto, C., Reinherz, E. L., Distaso, J. A., Steinberg, A. D., and **Schlossman, S. F.** Relationship between systemic lupus erythe*matosus T cell subsets, anti-T cell antibodies, and T cell functions.* 689.
Morkin, E., *See* Goldman, Olajos, and Morkin.
Morris, R. C., Jr., *See Portale, Booth, Halloran, and Morris.*
Mortimer, P. P., *See* Young, Mortimer, Moore, and Humphries.
Mott, D., *See Bogardus, Lillioja, Mott, Reaven, Kashiwagi, and Foley.*
—, *See* Bogardus, Lillioja, Stone, and Mott.
Mounier, F., *See* Galen, Devaux, Houot, Menard, Corvol, Corvol, Gubler, Mounier, and Camilleri.
Moxon, E. R., Deich, R. A., and Connelly, C. Cloning of chromosomal DNA from *Haemophilus influenzae. Its use for studying the* expression of type b capsule and virulence. 298.
Mruk, J. S., *See* Wilson, Salem, Mruk, Maruyama, and Majerus.
Muakasah, S., *See Cortas, Abras, Arnaout, Mooradian, and Muakasah.*
Mui, P. T. K., *See* Lian, Mui, Siddiqui, Chiu, and Chiu.
Mujais, S. K., Chekal, M. A., Jones, W. J., Hayslett, J. P., and Katz, **A. I.** Regulation of renal Na-K-ATPase in the rat. Role of the natural mineralo- and glucocorticoid hormones. 13.
Mukherjee, A., *See Muntz, Olson, Lariviere, D'Souza, Mukherjee, Will*erson, and Buja.
Muntz, K. H., Olson, E. G., Lariviere, G. R., D'Souza, S., Mukherjee, **A., Willerson, J. T., and Buja, L. M.** Autoradiographic character*ization of beta adrenergic receptors in coronary blood vessels and* myocytes in normal and ischemic myocardium of the canine heart. 349.
Murphy, S. B., *See* Look, Melvin, Brown, Dockter, Roberson, and *Murphy.*
Myers, B. D., Miller, D. C., Mehigan, J. T., Olcott, C., IV, Golbetz, H., Robertson, C. R., Derby, G., Spencer, R., and Friedman, S. Nature of renal injury following total renal ischemia in man. 329.

N

Nachman, R. L., *See* Leung, Nachman, and Harpel.
Nadeau, J., *See* Feldman, Limbird, Nadeau, Robertson, and Wood.
Nasjletti, A., *See* Kauker, Crofton, Share, and Nasjletti.
Neckers, L. M., *See Cossman, Neckers, Braziel, Trepel, Korsmeyer,* and Bakhshi.
Neubauer, J. A., *See Santiago, Guerra, Neubauer, and Edelman.*
Neuringer, M., Connor, W. E., Van Petten, C., and Barstad, L. Dietary omega-3 fatty acid deficiency and visual loss in infant rhesus mon*keys. 272.*
Nicholson, J. K. A., McDougal, J. S., Spira, T. J., Cross, G. D., Jones, B. M., and Reinherz, E. L. *Immunoregulatory subsets of the T* helper and T suppressor cell populations in homosexual men with chronic unexplained lymphadenopathy. 191.
Nicoloff, J. T., *See Lum, Nicoloff, Spencer, and Kaptein.*
Niebrugge, D. J., *See* Abkowitz, Fialkow, Niebrugge, Raskind, and Adamson.
Niedel, J. E., *See* Vandenbark, Kuhn, and Niedel.
Niedermeyer, M. E., *See* Bernard, Lucht, Niedermeyer, Snapper, Og*letree, and Brigham.*
Nojiri, H., *See* Kitagawa, Ohta, Nojiri, Kakinuma, Saito, Takaku, and Miura.
Norman, A. W., *See* Kadowaki and Norman.
Nutman, T. B., Ottesen, E. A., Fauci, A. S., and Volkman, D. J. Parasite *antigen-specific human T cell lines and clones. Major histocom*patibility complex restriction and B cell helper function. 1754.

O

Oates, J. A., *See* Carey, Duff, Roden, Primm, Wilkinson, Wang, Oates, and Woosley.
Oelberg, D. G., Chari, M. V., Little, J. M., Adcock, E. W., and Lester, **R.** Lithocholate glucuronide is a cholestatic agent. 1507.
Ogletree, M. L., *See* Bernard, Lucht, Niedermeyer, Snapper, Ogletree, and Brigham.
Ohta, M., *See* Kitagawa, Ohta, Nojiri, Kakinuma, Saito, Takaku, and *Miura.*
Okun, R., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Olajos, M., *See* Goldman, Olajos, and Morkin.
Olanow, C. W., *See Sabina, Swain, Olanow, Bradley, Fishbein, DiMauro,* and Holmes.
Olcott, C., IV, *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Olefsky, J. M., *See* Revers, Fink, Griffin, Olefsky, and Kolterman.
Oliver, C. N., *See Schmidt, Oliver, Lepe-Zuniga, Green, and Gery.*
Olson, E. G., *See* Muntz, Olson, Lariviere, D'Souza, Mukherjee, Willerson, and Buja.
Oppenheim, J. J., *See* Sztein, Steeg, Johnson, and Oppenheim.
O'Riordan, J. G., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, *Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer,* Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Orofino, G., *See* Saccà, Orofino, Petrone, and Vigorito.
Orth, D. N., *See* DeBold, Sheldon, DeCherney, Jackson, Alexander, Vale, Rivier, and Orth.

—, *See* Radosevich, Williams, McRae, Lacy, Orth, and Abumrad.
Östman, J., *See* Arner, Bolinder, Engfeldt, Hellmér, and Östman.
—, *See* Wahren, Sato, Östman, Hagenfeldt, and Felig.
Ott, S. M., *See* Ralph, Ott, Sherrard, and Hlastala.
Ottesen, E. A., *See* Nutman, Ottesen, Fauci, and Volkman.
Owen, O. E., *See* Boden, Rezvani, and Owen.

P

Palek, J., *See* Lawler, Liu, Palek, and Prchal.
Paller, M. S., Douglas, J. G., and Linas, S. L. Mechanism of decreased vascular reactivity to angiotensin II in conscious potassium-deficient rats. 79.
Panet, A., *See* Eldor, Fridman, Vlodavsky, Hy-Am, Fuks, and Panet.
Pannell, R., *See* Gurewich, Pannell, Louie, Kelley, Suddith, and Geenlee.
Pape, J. M., *See* Schedl, Miller, Pape, Horst, and Wilson.
Parfitt, A. M., Mathews, C. H. E., Brommage, R., Jarnagin, K., and DeLuca, H. F. Calcitriol but no other metabolite of vitamin D is essential for normal bone growth and development in the rat. 576.
Park, C. H., and Maack, T. Albumin absorption and catabolism by isolated perfused proximal convoluted tubules of the rabbit. 767.
Parker, C. J., Soldato, C. M., and Rosse, W. F. Abnormality of glycophorin-α on paroxysmal nocturnal hemoglobinuria erythrocytes. Evidences for a renin precursor. 1130.
Patton, G. M., Clark, S. B., Fasulo, J. M., and Robins, S. J. Utilization of individual lecithins in intestinal lipoprotein formation in the rat. 231.
Pegg, L. E., *See* Bar-Shavit, Kahn, Pegg, Stone, and Teitelbaum.
Perez, J., *See* Schlondorff, Satriano, Hagege, Perez, and Baud.
Permutt, M. A., Kakita, K., Malinas, P., Karl, I., Bonner-Weir, S., Weir, G., and Giddings, S. J. An in vivo analysis of pancreatic protein and insulin biosynthesis in a rat model for non–insulin-dependent diabetes. 1344.
Perriello, G., *See* Bolli, De Feo, Perriello, De Cosmo, Compagnucci, Santeusanio, Brunetti, and Unger.
Peterson, L. L., and Wuepper, K. D. Isolation and purification of a pemphigus vulgaris antigen from human epidermis. 1113.
Peterson, L. N., *See* Gutsche, Peterson, and Levine.
Petrone, A., *See* Saccà, Orofino, Petrone, and Vigorito.
Petrovic, O. M., and Miller, E. J. An unusual pattern of peptide-bound lysine metabolism in collagen from an infant with lethal perinatal osteogenesis imperfecta. 1569.
Pike, S. E., *See* Tosato, Steinberg, Yarchoan, Heilman, Pike, De Seau, and Blaese.
Piperno, J. R., *See* Walsh, Bradford, Sinha, Piperno, and Tuszynski.
Pippard, M., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Pitt, J., *See* Dana, Todd, Pitt, Springer, and Arnaout.
Pixley, R. A., *See* de Agostini, Lijnen, Pixley, Colman, and Schapira.
Pizzo, S. V., *See* Fuchs, Trapp, Griffith, Roberts, and Pizzo.
Platzer, E., *See* Broxmeyer, Juliano, Lu, Platzer, and Dupont.
Polonsky, K. S., *See* Shoelson, Polonsky, Zeidler, Rubenstein, and Tager.
Portale, A. A., Booth, B. E., Halloran, B. P., and Morris, R. C., Jr. Effect of dietary phosphorus on circulating concentrations of 1,25-dihydroxyvitamin D and immunoreactive parathyroid hormone in children with moderate renal insufficiency. 1580.
Powers, P. A., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Pozzan, T., *See* Lagast, Pozzan, Waldvogel, and Lew.
Prack, M., *See* Small, Bond, Waugh, Prack, and Sawyer.
Prchal, J., *See* Lawler, Liu, Palek, and Prchal.
Primm, R. K., *See* Carey, Duff, Roden, Primm, Wilkinson, Wang, Oates, and Woosley.

R

Rabin, D., *See* Evans, Doelle, Lindner, Bradley, and Rabin.
Radosevich, P. M., Williams, P. E., McRae, J. R., Lacy, W. W., Orth, D. N., and Abumrad, N. N. β-Endorphin inhibits glucose production in the conscious dog. 1237.
Rall, S. C., Jr., *See* Weisgraber, Rall, Innerarity, Mahley, Kuusi, and Ehnholm.
Ralph, D. D., Ott, S. M., Sherrard, D. J., and Hlastala, M. P. Inert gas analysis of ventilation-perfusion matching during hemodialysis. 1385.
Raskind, W. H., *See* Abkowitz, Fialkow, Niebrugge, Raskind, and Adamson.
Reaven, G. R., *See* Bogardus, Lillioja, Mott, Reaven, Kashiwagi, and Foley.
Reber, M., *See* Cines, Lyss, Reber, Bina, and DeHoratius.
Rebouche, C. J., and Engel, A. G. Kinetic compartmental analysis of carnitine metabolism in the human carnitine deficiency syndromes. Evidence for alterations in tissue carnitine transport. 857.
Rector, F. C., Jr., *See* Ives and Rector.
Reedy, T., *See* Eysselein, Maxwell, Reedy, Wünsch, and Walsh.
Reedy, T. J., *See* Soll, Amirian, Thomas, Reedy, and Elashoff.
Regiani, S., *See* Weiss and Regiani.
Reinherz, E. L., *See* Morimoto, Reinherz, Distaso, Steinberg, and Schlossman.
—, *See* Nicholson, McDougal, Spira, Cross, Jones, and Reinherz.
Rennke, H. G., *See* Dworkin, Hostetter, Rennke, and Brenner.
Revak, S. D., *See* Schraufstätter, Revak, and Cochrane.
Revers, R. R., Fink, R., Griffin, J., Olefsky, J. M., and Kolterman, O. G. Influence of hyperglycemia on insulin's in vivo effects in Type II diabetes. 664.
Rezvani, I., *See* Boden, Rezvani, and Owen.
Riggs, B. L., *See* Tsai, Heath, Kumar, and Riggs.
Rivier, J., *See* DeBold, Sheldon, DeCherney, Jackson, Alexander, Vale, Rivier, and Orth.
—, *See* Frohman, Thominet, Webb, Vance, Uderman, Rivier, Vale, and Thorner.
Robbins, D. C., Shoelson, S. E., Rubenstein, A. H., and Tager, H. S. Familial hyperproinsulinemia. Two cohorts secreting indistinguishable type II intermediates of proinsulin conversion. 714.
Roberson, P. K., *See* Look, Melvin, Brown, Dockter, Roberson, and Murphy.
Roberts, H. R., *See* Fuchs, Trapp, Griffith, Roberts, and Pizzo.
Robertson, C. R., *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Robertson, D., *See* Feldman, Limbird, Nadeau, Robertson, and Wood.
Robins, S. J., *See* Patton, Clark, Fasulo, and Robins.
Robson, A. M., *See* Vehaskari, Chang, Stevens, and Robson.
Roden, D. M., *See* Carey, Duff, Roden, Primm, Wilkinson, Wang, Oates, and Woosley.
Rodgers, G. M., *See* Drake, Rodgers, and Sande.
Roe, C. R., Millington, D. S., Maltby, D. A., Bohan, T. P., and Hoppel, C. L. L-carnitine enhances excretion of propionyl Coenzyme A as propionylcarnitine in propionic acidemia. 1785.
Rojas, F. J., *See* Dighe, Rojas, Birnbaumer, and Garber.
—, *See* Dighe, Rojas, Birnbaumer, and Garber.
Rosen, S., *See* Brezis, Rosen, Silva, and Epstein.
Rosen, S. G., Clutter, W. E., Berk, M. A., Shah, S. D., and Cryer, P. E. Epinephrine supports the postabsorptive plasma glucose concentration and prevents hypoglycemia when glucagon secretion is deficient in man. 405.
Rosse, W. F., Devine, D. V., and Ware, R. Reactions of immunoglobulin G-binding ligands with platelets and platelet-associated immunoglobulin G. 488.
—, *See* Parker, Soldato, and Rosse.
Rothberger, H., McGee, M. P., and Lee, T.-K. Tissue factor activity.

A marker of alveolar macrophage maturation in rabbits. Effects of granulomatous pneumonitis. 1524.
Rozenberg-Arska, M., van Strijp, J. A. G., Hoekstra, W. P. M., and Verhoef, J. Effect of human polymorphonuclear and mononuclear leukocytes on chromosomal and plasmid DNA of *Escherichia coli*. Role of acid DNase. 1254.
Rubenstein, A. H., *See* Robbins, Shoelson, Rubenstein, and Tager.
—, *See* Shoelson, Polonsky, Zeidler, Rubenstein, and Tager.
Ruddy, M. C., *See* Atlas, Hesson, Sealey, Dharmgrongartama, Laragh, Ruddy, and Aurell.
Rudolph, A. M., *See* Breall, Rudolph, and Heymann.
Ruff, R. L., and Secrist, D. Inhibitors of prostaglandin synthesis or cathepsin B prevent muscle wasting due to sepsis in the rat. 1483.
Rutlen, D. L., and Underwood, R. S. Reflex influence of selective coronary artery occlusion on the total capacitance vasculature in the dog. 241.

S

Saba, T. M., *See* Deno, McCafferty, Saba, and Blumenstock.
Sabina, R. L., Swain, J. L., Olanow, C. W., Bradley, W. G., Fishbein, W. N., DiMauro, S., and Holmes, E. W. Myoadenylate deaminase deficiency. Functional and metabolic abnormalities associated with disruption of the purine nucleotide cycle. 720.
Saccà, L., Orofino, G., Petrone, A., and Vigorito, C. Differential roles of splanchnic and peripheral tissues in the pathogenesis of impaired glucose tolerance. 1683.
Saito, M., *See* Kitagawa, Ohta, Nojiri, Kakinuma, Saito, Takaku, and Miura.
Salem, H. H., Esmon, N. L., Esmon, C. T., and Majerus, P. W. Effects of thrombomodulin and coagulation Factor V_a-light chain on protein C activation in vitro. 968.
—, *See* Wilson, Salem, Mruk, Maruyama, and Majerus.
Sande, M. A., *See* Drake, Rodgers, and Sande.
Santa Ana, C., *See* Bo-Linn, Davis, Buddrus, Morawski, Santa Ana, and Fordtran.
Santeusanio, F., *See* Bolli, De Feo, Perriello, De Cosmo, Compagnucci, Santeusanio, Brunetti, and Unger.
Santiago, T. V., Guerra, E., Neubauer, J. A., and Edelman, N. H. Correlation between ventilation and brain blood flow during sleep. 497.
Sarin, P. S., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Sass-Kuhn, S. P., Moqbel, R., Mackay, J. A., Cromwell, O., and Kay, A. B. Human granulocyte/pollen-binding protein. Recognition and identification as transferrin. 202.
Sastrasinh, M., *See* Humes, Sastrasinh, and Weinberg.
Sato, F., *See* Sato and Sato.
Sato, K., and Sato, F. Defective beta adrenergic response of cystic fibrosis sweat glands in vivo and in vitro. 1763.
Sato, Y., *See* Wahren, Sato, Östman, Hagenfeldt, and Felig.
Satriano, J. A., *See* Schlondorff, Satriano, Hagege, Perez, and Baud.
Sawyer, J. K., *See* Small, Bond, Waugh, Prack, and Sawyer.
Saxinger, C., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Saxon, A., and Barnett, E. Human auto-antiidiotypes regulating T cell-mediated reactivity to tetanus toxoid. 342.
—, *See* Kodo, Gale, and Saxon.
Schaefer, E. J., *See* Hoeg, Demosky, Schaefer, Starzl, and Brewer.
Schaefer, R. A., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Schafer, A. I., Crawford, D. D., and Gimbrone, M. A., Jr. Unidirectional transfer of prostaglandin endoperoxides between platelets and endothelial cells. 1105.
Schaible, T. F., Ciambrone, G. J., Capasso, J. M., and Scheuer, J. Cardiac conditioning ameliorates cardiac dysfunction associated with renal hypertension in rats. 1086.
Schapira, M., *See* de Agostini, Lijnen, Pixley, Colman, and Schapira.
—, *See* Scott, Silver, Schapira, and Colman.
Schedl, H. P., Miller, D. L., Pape, J. M., Horst, R. L., and Wilson, H. D. Calcium and sodium transport and vitamin D metabolism in the spontaneously hypertensive rat. 980.
Schenker, S., *See* Mitchell, Schenker, and Speeg.
Scheuer, J., *See* Schaible, Ciambrone, Capasso, and Scheuer.
Schlondorff, D., Satriano, J. A., Hagege, J., Perez, J., and Baud, L. Effect of platelet-activating factor and serum-treated zymosan on prostaglandin E_2 synthesis, arachidonic acid release, and contraction of cultured rat mesangial cells. 1227.
Schlossman, S. F., *See* Morimoto, Reinherz, Distaso, Steinberg, and Schlossman.
Schmidt, J. A., Oliver, C. N., Lepe-Zuniga, J. L., Green, I., and Gery, I. Silica-stimulated monocytes release fibroblast proliferation factors identical to interleukin 1. A potential role for interleukin 1 in the pathogenesis of silicosis. 1462.
Schoenfield, L. J., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Schraufstätter, I. U., Revak, S. D., and Cochrane, C. G. Proteases and oxidants in experimental pulmonary inflammatory injury. 1175.
Schreiber, R. D., *See* Mayes, Schreiber, and Cooper.
Schullek, J., Jordan, J., and Montgomery, R. R. Interaction of von Willebrand factor with human platelets in the plasma milieu. 421.
Schuster, V. L., Kokko, J. P., and Jacobson, H. R. Angiotensin II directly stimulates sodium transport in rabbit proximal convoluted tubules. 507.
—, Kokko, J. P., and Jacobson, H. R. Interactions of lysyl-bradykinin and antidiuretic hormone in the rabbit cortical collecting tubule. 1659.
Schwartz, B. R., *See* Harlan, Levine, Callahan, Schwartz, and Harker.
Scott, C. F., Silver, L. D., Schapira, M., and Colman, R. W. Cleavage of human high molecular weight kininogen markedly enhances its coagulant activity. Evidence that this molecule exists as a procofactor. 954.
Scudder, L. E., *See* Coller, Kalomiris, Steinberg, and Scudder.
Sealey, J. E., *See* Atlas, Hesson, Sealey, Dharmgrongartama, Laragh, Ruddy, and Aurell.
Seaman, F. S., *See* Sinha, Seaman, Koshy, Knight, and Walsh.
Secrist, D., *See* Ruff and Secrist.
Seligson, D., *See* Gautam, Seligson, Gordon, Seligson, and Boyer.
Seligson, H., *See* Gautam, Seligson, Gordon, Seligson, and Boyer.
Shafritz, D. A., *See* Zern, Yap, Strair, Kaysen, and Shafritz.
Shah, S. D., *See* Rosen, Clutter, Berk, Shah, and Cryer.
Shamsuddin, M., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Share, L., *See* Kauker, Crofton, Share, and Nasjletti.
Sharrow, S., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Shaw, L., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Shattil, S. J., *See* Brass and Shattil.
Sheldon, W. R., *See* DeBold, Sheldon, DeCherney, Jackson, Alexander, Vale, Rivier, and Orth.
Shen, L., *See* Ball, Guyre, Shen, Glynn, Maliszewski, Baker, and Fanger.
Sherrard, D. J., *See* Ralph, Ott, Sherrard, and Hlastala.

Sherwin, R. S., *See* Simonson, Koivisto, Sherwin, Ferrannini, Hendler, Juhlin-Dannfelt, and DeFronzo.
Shoelson, S. E., Polonsky, K. S., Zeidler, A., Rubenstein, A. H., and Tager, H. S. Human insulin B24 (Phe → Ser). Secretion and metabolic clearance of the abnormal insulin in man and in a dog model. 1351.
—, *See* Robbins, Shoelson, Rubenstein, and Tager.
Siddiqui, F. A., *See* Lian, Mui, Siddiqui, Chiu, and Chiu.
Silva, J. E., Gordon, M. B., Crantz, F. R., Leonard, J. L., and Larsen, P. R. Qualitative and quantitative differences in the pathways of extrathyroidal triiodothyronine generation between euthyroid and hypothyroid rats. 898.
Silva, P., *See* Brezis, Rosen, Silva, and Epstein.
Silver, L. D., *See* Scott, Silver, Schapira, and Colman.
Simmons, P. S., Miles, J. M., Gerich, J. E., and Haymond, M. W. Increased proteolysis. An effect of increases in plasma cortisol within the physiologic range. 412.
Simonson, D. C., Koivisto, V., Sherwin, R. S., Ferrannini, E., Hendler, R., Juhlin-Dannfelt, A., and DeFronzo, R. A. Adrenergic blockade alters glucose kinetics during exercise in insulin-dependent diabetics. 1648.
—, *See* DeFronzo, Thorin, Felber, Simonson, Thiebaud, Jequier, and Golay.
Sinha, D., Seaman, F. S., Koshy, A., Knight, L. C., and Walsh, P. N. Blood coagulation Factor XIa binds specifically to a site on activated human platelets distinct from that for Factor XI. 1550.
—, *See* Walsh, Bradford, Sinha, Piperno, and Tuszynski.
Sit, S. P., *See* Vatner, Homcy, Sit, Manders. W. T., and Vatner.
Small, D. M., Bond, M. G., Waugh, D., Prack, M., and Sawyer, J. K. Physiocochemical and histological changes in the arterial wall of nonhuman primates during progression and regression of atherosclerosis. 1590.
Smith, C. V., *See* Lauterburg, Smith, Hughes, and Mitchell.
Smith, J. W., *See* Mackowiak, Marling-Cason, Smith, and Luby.
Snapper, J. R., *See* Bernard, Lucht, Niedermeyer, Snapper, Ogletree, and Brigham.
Snyderman, R., *See* Yuli and Snyderman.
Sobel, B. E., *See* Lange, Hartman, and Sobel.
Soldato, C. M., *See* Parker, Soldato, and Rosse.
Soldin, S., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.
Soll, A. H., Amirian, D. A., Thomas, L. P., Reedy, T. J., and Elashoff, J. D. Gastrin receptors on isolated canine parietal cells. 1434.
Soloway, R. D., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Speeg, K. V., Jr., *See* Mitchell, Schenker, and Speeg.
Spencer, C. A., *See* Lum, Nicoloff, Spencer, and Kaptein.
Spencer, R., *See* Myers, Miller, Mehigan, Olcott, Golbetz, Robertson, Derby, Spencer, and Friedman.
Spiegel, A. M., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
Spira, T. J., *See* Nicholson, McDougal, Spira, Cross, Jones, and Reinherz.
Springer, T. A., *See* Dana, Todd, Pitt, Springer, and Arnaout.
Spritz, R. A., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Stalcup, S. A., *See* Davidson and Stalcup.
Stamoutsos, B. A., *See* Barron, Stamoutsos, and Lindheimer.
Starzl, T. E., *See* Hoeg, Demosky, Schaefer, Starzl, and Brewer.
Staszewski, H., *See* Warrell, Bockman, Coonley, Isaacs, and Staszewski.
Steeg, P. S., *See* Sztein, Steeg, Johnson, and Oppenheim.
Steinberg, A. D., *See* Morimoto, Reinherz, Distaso, Steinberg, and Schlossman.
—, *See* Tosato, Steinberg, Yarchoan, Heilman, Pike, De Seau, and Blaese.
Steinberg, M., *See* Coller, Kalomiris, Steinberg, and Scudder.
Steinman, C. R. Circulating DNA in systemic lupus erythematosus. Isolation and characterization. 832.
Stendahl, O., Coble, B.-I., Dahlgren, C., Hed, J., and Molin, L. Myeloperoxidase modulates the phagocytic activity of polymorphonuclear neutrophil leukocytes. Studies with cells from a myeloperoxidase-deficient patient. 366.
Stevens, J. K., *See* Vehaskari, Chang, Stevens, and Robson.
Stevenson, H. C., *See* Bonvini, Bougnoux, Stevenson, Miller, and Hoffman.
Stone, K., *See* Bogardus, Lillioja, Stone, and Mott.
Stone, K. R., *See* Bar-Shavit, Kahn, Pegg, Stone, and Teitelbaum.
Stone, O. L., *See* Chapman, Stone, and Vavrin.
Strair, R. K., *See* Zern, Yap, Strair, Kaysen, and Shafritz.
Sturgill, B. C., *See* Bolton, Tucker, and Sturgill.
Suddith, R. L., *See* Gurewich, Pannell, Louie, Kelley, Suddith, and Geenlee.
Suki, W. N., *See* Krothapalli and Suki.
Swaak, A. J. G., *See* Biemond, van Eijk, Swaak, and Koster.
Swain, J. L., *See* Sabina, Swain, Olanow, Bradley, Fishbein, DiMauro, and Holmes.
Sztein, M. B., Steeg, P. S., Johnson, H. M., and Oppenheim, J. J. Regulation of human peripheral blood monocyte DR antigen expression in vitro by lymphokines and recombinant interferons. 556.

T

Taborsky, G. J., Jr., and Ensinck, J. W. Contribution of the pancreas to circulating somatostatin-like immunoreactivity in the normal dog. 216.
Tager, H. S., *See* Robbins, Shoelson, Rubenstein, and Tager.
—, *See* Shoelson, Polonsky, Zeidler, Rubenstein, and Tager.
Takaku, F., *See* Kitagawa, Ohta, Nojiri, Kakinuma, Saito, Takaku, and Miura.
Tanaka, K., *See* Hyman and Tanaka.
Tassinari, M., *See* Lian, Tassinari, and Glowacki.
Teitelbaum, S. L., *See* Bar-Shavit, Kahn, Pegg, Stone, and Teitelbaum.
Tenner, A. J., *See* Terkeltaub, Curtiss, Tenner, and Ginsberg.
Terkeltaub, R., Curtiss, L. K., Tenner, A. J., and Ginsberg, M. H. Lipoproteins containing apoprotein B are a major regulator of neutrophil responses to monosodium urate crystals. 1719.
Thiebaud, D., *See* DeFronzo, Thorin, Felber, Simonson, Thiebaud, Jequier, and Golay.
Thiel, E., *See* Holzbach, Kibe, Thiel, Howell, Marsh, and Hermann.
Thirlby, R. C., and Feldman, M. Effect of chronic sham feeding on maximal gastric acid secretion in the dog. 566.
Thistle, J. L., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Thomas, F. P., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.
Thomas, L. P., *See* Soll, Amirian, Thomas, Reedy, and Elashoff.
Thominet, J. L., *See* Frohman, Thominet, Webb, Vance, Uderman, Rivier, Vale, and Thorner.
Thorin, D., *See* DeFronzo, Thorin, Felber, Simonson, Thiebaud, Jequier, and Golay.
Thorner, M. O., *See* Frohman, Thominet, Webb, Vance, Uderman, Rivier, Vale, and Thorner.
Todd, R. F., III, *See* Dana, Todd, Pitt, Springer, and Arnaout.
Toh, B. H., *See* Lolait, Lim, Toh, and Funder.
Tolstoshev, P., *See* Grunebaum, Cazenave, Camerino, Kloepfer, Mandel, Tolstoshev, Jaye, De la Salle, and Lococq.
Tosato, G., Steinberg, A. D., Yarchoan, R., Heilman, C. A., Pike,

S. E., De Seau, V., and Blaese, R. M. Abnormally elevated frequency of Epstein-Barr virus-infected B cells in the blood of patients with rheumatoid arthritis. 1789.
Tran, T., *See* Inoue, Kinne, Tran, and Arias.
Trapp, H. G., *See* Fuchs, Trapp, Griffith, Roberts, and Pizzo.
Trepel, J. B., *See* Cossman, Neckers, Braziel, Trepel, Korsmeyer, and Bakhshi.
Tsai, K.-S., Heath, H., III, Kumar, R., and Riggs, B. L. Impaired vitamin D metabolism with aging in women. Possible role in pathogenesis of senile osteoporosis. 1668.
Tsalikian, E., *See* Bolli, Tsalikian, Haymond, Cryer, and Gerich.
Tucker, F. L., *See* Bolton, Tucker, and Sturgill.
Turrens, J. F., Crapo, J. D., and Freeman, B. A. Protection against oxygen toxicity by intravenous injection of liposome-entrapped catalase and superoxide dismutase. 87.
Tuszynski, G. P., *See* Walsh, Bradford, Sinha, Piperno, and Tuszynski.
Tyor, M. P., *See* Grundy, Lan, Lachin, Baum, Habig, Hanson, Hersh, Hightower, Hofmann, Lasser, Marks, Mekhjian, Okun, Schaefer, Schoenfield, Shaw, Soloway, Thistle, Thomas, and Tyor.

U

Uchiyama, T., *See* Waldmann, Greene, Sarin, Saxinger, Blayney, Blattner, Goldman, Bongiovanni, Sharrow, Depper, Leonard, Uchiyama, and Gallo.
Uderman, H., *See* Frohman, Thominet, Webb, Vance, Uderman, Rivier, Vale, and Thorner.
Uges, D. R. A., *See* Agoston, Maestrone, van Hezik, Ket, Houwertjes, and Uges.
Underwood, R. S., *See* Rutlen and Underwood.
Unger, R. H., *See* Bolli, De Feo, Perriello, De Cosmo, Compagnucci, Santeusanio, Brunetti, and Unger.
Unkeless, J. C., *See* Fleit, Wright, Durie, Valinsky, and Unkeless.

V

Valcourt, E., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Vale, W., *See* DeBold, Sheldon, DeCherney, Jackson, Alexander, Vale, Rivier, and Orth.
—, *See* Frohman, Thominet, Webb, Vance, Uderman, Rivier, Vale, and Thorner.
Valinsky, J. E., *See* Fleit, Wright, Durie, Valinsky, and Unkeless.
Van de Werf, F., Minten, J., Carmeliet, P., De Geest, H., and Kesteloot, H. The genesis of the third and fourth heart sounds. A pressure-flow study in dogs. 1400.
van Eijk, H. G., *See* Biemond, van Eijk, Swaak, and Koster.
Van Epps, D. E., *See* Hesse, Cole, Van Epps, and Williams.
van Hezik, E. J., *See* Agoston, Maestrone, van Hezik, Ket, Houwertjes, and Uges.
Van Loon, G. R., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.
Van Petten, C., *See* Neuringer, Connor, Van Petten, and Barstad.
van Strijp, J. A. G., *See* Rozenberg-Arska, van Strijp, Hoekstra, and Verhoef.
Vance, M. L., *See* Frohman, Thominet, Webb, Vance, Uderman, Rivier, Vale, and Thorner.
Vandekerckhove, J., *See* Gabbiani, Kocher, Bloom, Vandekerckhove, and Weber.
Vandenbark, G. R., Kuhn, L. J., and Niedel, J. E. Possible mechanism of phorbol diester-induced maturation of human promyelocytic leukemia cells. Activation of protein kinase C. 448.
Vatner, D. E., Homcy, C. J., Sit, S. P., Manders. W. T., and Vatner, S. F. Effects of pressure overload, left ventricular hypertrophy on β-adrenergic receptors, and responsiveness to catecholamines. 1473.
Vatner, S. F., *See* Vatner, Homcy, Sit, Manders. W. T., and Vatner.
Vavrin, Z., *See* Chapman, Stone, and Vavrin.
Vehaskari, V. M., Chang, C. T.-C., Stevens, J. K., and Robson, A. M. The effects of polycations on vascular permeability in the rat. A proposed role for charge sites. 1053.
Verhoef, J., *See* Rozenberg-Arska, van Strijp, Hoekstra, and Verhoef.
Vida, L. N., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Vigorito, C., *See* Saccà, Orofino, Petrone, and Vigorito.
Vlodavsky, I., *See* Eldor, Fridman, Vlodavsky, Hy-Am, Fuks, and Panet.
Volkman, D. J., *See* Nutman, Ottesen, Fauci, and Volkman.

W

Wahren, J., Sato, Y., Östman, J., Hagenfeldt, L., and Felig, P. Turnover and splanchnic metabolism of free fatty acids and ketones in insulin-dependent diabetics at rest and in response to exercise. 1367.
Waldmann, T. A., Greene, W. C., Sarin, P. S., Saxinger, C., Blayney, D. W., Blattner, W. A., Goldman, C. K., Bongiovanni, K., Sharrow, S., Depper, J. M., Leonard, W., Uchiyama, T., and Gallo, R. C. Functional and phenotypic comparison of human T cell leukemia/lymphoma virus positive adult T cell leukemia with human T cell leukemia/lymphoma virus negative Sézary leukemia and their distinction using anti-Tac. Mononuclear antibody identifying the human receptor for T cell growth factor. 1711.
Waldvogel, F. A., *See* Lagast, Lew, and Waldvogel.
—, *See* Lagast, Pozzan, Waldvogel, and Lew.
—, *See* Zimmerli, Lew, and Waldvogel.
Waloch, J., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Walsh, J. H., *See* Biancani, Walsh, and Behar.
—, *See* Eysselein, Maxwell, Reedy, Wünsch, and Walsh.
—, *See* Kleibeuker, Eysselein, Maxwell, and Walsh.
Walsh, P., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.
Walsh, P. N., Bradford, H., Sinha, D., Piperno, J. R., and Tuszynski, G. P. Kinetics of the Factor XIa catalyzed activation of human blood coagulation Factor IX. 1392.
—, *See* Sinha, Seaman, Koshy, Knight, and Walsh.
Wang, T., *See* Carey, Duff, Roden, Primm, Wilkinson, Wang, Oates, and Woosley.
Ware, R., *See* Rosse, Devine, and Ware.
Warrell, R. P., Jr., Bockman, R. S., Coonley, C. J., Isaacs, M., and Staszewski, H. Gallium nitrate inhibits calcium resportion from bone and is effective treatment for cancer-related hypercalcemia. 1487.
Warsh, J. J., *See* McInnes, Kaufman, Warsh, Van Loon, Milstien, Kapatos, Soldin, Walsh, MacGregor, and Hanley.
Wasi, P., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Waugh, D., *See* Small, Bond, Waugh, Prack, and Sawyer.
Wünsch, E., *See* Eysselein, Maxwell, Reedy, Wünsch, and Walsh.
Weatherall, D. J., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Weaver, D. D., *See* Kovacs, Griffin, Weaver, Carlson, and Wilson.
Webb, C. B., *See* Frohman, Thominet, Webb, Vance, Uderman, Rivier, Vale, and Thorner.
Weber, K., *See* Gabbiani, Kocher, Bloom, Vandekerckhove, and Weber.

Weech, P. K., *See* Milne, Weech, Blanchette, Davignon, Alaupovic, and Marcel.
Weil, S. C., *See* Honig, Shamsuddin, Vida, Mompoint, Valcourt, Bowie, Jones, Powers, Spritz, Guis, Embury, Conboy, Kan, Mentzer, Weil, Hirata, Waloch, O'Riordan, and Goldstick.
Weinberg, J. M., *See* Humes, Sastrasinh, and Weinberg.
Weinstein, M. J., and Chute, L. E. Two distinct forms of Factor VIII coagulant protein in human plasma. Cleavage by thrombin, and differences in coagulant activity and association with von Willebrand factor. 307.
Weir, G., *See* Permutt, Kakita, Malinas, Karl, Bonner-Weir, Weir, and Giddings.
Weisgraber, K. H., Rall, S. C., Jr., Innerarity, T. L., Mahley, R. W., Kuusi, T., and Ehnholm, C. A novel electrophoretic variant of human apolipoprotein E. Identification and characterization of apolipoprotein E1. 1024.
Weiss, I., *See* Davies, Weiss, and Gerber.
Weiss, S. J., and Regiani, S. Neutrophils degrade subendothelial matrices in the presence of alpha-l-proteinase inhibitor. Cooperative use of lysosomal proteinases and oxygen metabolites. 1297.
Wesson, D. E., *See* Frommer, Laski, Wesson, and Kurtzman.
Wickramasinghe, S. N., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Wilkinson, G. R., *See* Carey, Duff, Roden, Primm, Wilkinson, Wang, Oates, and Woosley.
Willerson, J. T., *See* Muntz, Olson, Lariviere, D'Souza, Mukherjee, Willerson, and Buja.
Williams, P. E., *See* Radosevich, Williams, McRae, Lacy, Orth, and Abumrad.
Williams, R. C., Jr., *See* Hesse, Cole, Van Epps, and Williams.
Wilson, C. B., and Haas, J. E. Cellular defenses against *Toxoplasma gondii* in newborns. 1606.
—, *See* Jacobs, Locksley, Wilson, Haas, and Klebanoff.
Wilson, D. B., Salem, H. H., Mruk, J. S., Maruyama, I., and Majerus, P. W. Biosynthesis of coagulation Factor V by a human hepatocellular carcinoma cell line. 654.
Wilson, H. D., *See* Schedl, Miller, Pape, Horst, and Wilson.
Wilson, J. D., *See* Kovacs, Griffin, Weaver, Carlson, and Wilson.
Wolff, S. M., *See* Ikejima, Dinarello, Gill, and Wolff.
Wood, A. J. J., *See* Feldman, Limbird, Nadeau, Robertson, and Wood.
Wood, W. G., *See* Derry, Wood, Pippard, Clegg, Weatherall, Wickramasinghe, Darley, Fucharoen, and Wasi.
Woosley, R. L., *See* Carey, Duff, Roden, Primm, Wilkinson, Wang, Oates, and Woosley.
Wreggett, K. A., *See* Heinsimer, Davies, Downs, Levine, Spiegel, Drezner, De Lean, Wreggett, Caron, and Lefkowitz.
Wright, S. D., *See* Fleit, Wright, Durie, Valinsky, and Unkeless.
Wuepper, K. D., *See* Peterson and Wuepper.

Y

Yamaji, T., *See* Ishibashi and Yamaji.
Yap, S. H., *See* Zern, Yap, Strair, Kaysen, and Shafritz.
Yarchoan, R., *See* Tosato, Steinberg, Yarchoan, Heilman, Pike, De Seau, and Blaese.
Yatziv, S., *See* Almagor, Kahane, and Yatziv.
Young, N. S., Mortimer, P. P., Moore, J. G., and Humphries, R. K. Characterization of a virus that causes transient aplastic crisis. 224.
Young, V. R., *See* Hoffer, Bistrian, Young, Blackburn, and Matthews.
Yuli, I., and Snyderman, R. Rapid changes in light scattering from human polymorphonuclear leukocytes exposed to chemoattractants. Discrete responses correlated with chemotactic and secretory functions. 1408.

Z

Zehngebot, L. M., *See* Guerry, Alexander, Herlyn, Zehngebot, Mitchell, Zmijewski, and Lusk.
Zeidler, A., *See* Shoelson, Polonsky, Zeidler, Rubenstein, and Tager.
Zern, M. A., Yap, S. H., Strair, R. K., Kaysen, G. A., and Shafritz, D. A. Effects of chronic renal failure on protein synthesis and albumin messenger ribonucleic acid in rat liver. 1167.
Zimmerli, W., Lew, P. D., and Waldvogel, F. A. Pathogenesis of foreign body infection. Evidence for a local granulocyte defect. 1191.
Zmijewski, C. M., *See* Guerry, Alexander, Herlyn, Zehngebot, Mitchell, Zmijewski, and Lusk.

Contents

The Journal of Clinical Investigation
January 1984, Volume 73, Number 1

Perspectives

Guanine nucleotide-binding regulatory proteins and dual control of adenylate cyclase. *A. G. Gilman* 1

Regular Articles

Complex formation of platelet thrombospondin with histidine-rich glycoprotein. *L. L. K. Leung, R. L. Nachman, and P. C. Harpel* 5

Regulation of renal Na-K-ATPase in the rat. Role of the natural mineralo- and glucocorticoid hormones. *S. K. Mujais, M. A. Chekal, W. J. Jones, J. P. Hayslett, and A. I. Katz* 13

Mechanism of acute depletion of plasma fibronectin following thermal injury in rats. Appearance of a gelatinlike ligand in plasma. *D. C. Deno, M. H. McCafferty, T. M. Saba, and F. A. Blumenstock* 20

Biliary proteins. Unique inhibitors of cholesterol crystal nucleation in human gallbladder bile. *R. T. Holzbach, A. Kibe, E. Thiel, J. H. Howell, M. Marsh, and R. E. Hermann* 35

Energetics of sodium transport in the urinary bladder of the toad. Effect of aldosterone and sodium cyanide. *N. Cortas, E. Abras, M. Arnaout, A. Mooradian, and S. Muakasah* 46

Immunosuppression by D-penicillamine in vitro. Inhibition of human T lymphocyte proliferation by copper- or ceruloplasmin-dependent generation of hydrogen peroxide and protection by monocytes. *P. E. Lipsky* 53

Direct effects of catecholamines, thyrotropin-releasing hormone, and somatostatin on growth hormone and prolactin secretion from adenomatous and nonadenomatous human pituitary cells in culture. *M. Ishibashi and T. Yamaji* 66

Mechanism of decreased vascular reactivity to angiotensin II in conscious, potassium-deficient rats. *M. S. Paller, J. G. Douglas, and S. L. Linas* 79

Protection against oxygen toxicity by intravenous injection of liposome-entrapped catalase and superoxide dismutase. *J. F. Turrens, J. D. Crapo, and B. A. Freeman* 87

Segmental chloride and fluid handling during correction of chloride-depletion alkalosis without volume expansion in the rat. *J. H. Galla, D. N. Bonduris, S. L. Dumbauld, and R. G. Luke* 96

Adenosine triphosphate-dependent calcium pump in the plasma membrane of guinea pig and human neutrophils. *H. Lagast, P. D. Lew, and F. A. Waldvogel* 107

Concurrent sickle cell anemia and α-thalassemia. Effect on pathological properties of sickle erythrocytes. *S. H. Embury, M. R. Clark, G. Monroy, and N. Mohandas* 116

Biliary excretion of glutathione and glutathione disulfide in the rat. Regulation and response to oxidative stress. *B. H. Lauterburg, C. V. Smith, H. Hughes, and J. R. Mitchell* 124

Calcium is a competitive inhibitor of gentamicin-renal membrane binding interactions and dietary calcium supplementation protects against gentamicin nephrotoxicity. *H. D. Humes, M. Sastrasinh, and J. M. Weinberg* 134

Actin expression in smooth muscle cells of rat aortic intimal thickening, human atheromatous plaque, and cultured rat aortic media. *G. Gabbiani, O. Kocher, W. S. Bloom, J. Vandekerckhove, and K. Weber* 148

Deficiency of a surface membrane glycoprotein (Mol) in man. *N. Dana, R. F. Todd III, J. Pitt, T. A. Springer, and M. A. Arnaout* 153

Development and application of an enzyme-linked immunosorbent assay for the quantitation of alternative complement pathway activation in human serum. *J. T. Mayes, R. D. Schreiber, and N. R. Cooper* 160

Short-term aluminum administration in the rat. Effects on bone formation and relationship to renal osteomalacia. *W. G. Goodman, J. Gilligan, and R. Horst* 171

Selective vulnerability of the medullary thick ascending limb to anoxia in the isolated perfused rat kidney. *M. Brezis, S. Rosen, P. Silva, and F. H. Epstein* 182

Immunoregulatory subsets of the T helper and T suppressor cell populations in homosexual men with chronic unexplained lymphadenopathy. *J. K. A. Nicholson, J. S. McDougal, T. J. Spira, G. D. Cross, B. M. Jones, and E. L. Reinherz* 191

Human granulocyte/pollen-binding protein. Recognition and identification as transferrin. *S. P. Sass-Kuhn, R. Moqbel, J. A. Mackay, O. Cromwell, and A. B. Kay* . . . 202

Arthritis induced in rats by cloned T lymphocytes responsive to mycobacteria but not to collagen type II. *J. Holoshitz, A. Matitiau, and I. R. Cohen* 211

Contribution of the pancreas to circulating somatostatin-like immunoreactivity in the normal dog. *G. J. Taborsky, Jr. and J. W. Ensinck* 216

Characterization of a virus that causes transient aplastic crisis. *N. S. Young, P. P. Mortimer, J. G. Moore, and R. K. Humphries* 224

Utilization of individual lecithins in intestinal lipoprotein formation in the rat. *G. M. Patton, S. B. Clark, J. M. Fasulo, and S. J. Robins* 231

Reflex influence of selective coronary artery occlusion on the total capacitance vasculature in the dog. *D. L. Rutlen and R. S. Underwood* 241

Interferon enhances prostacyclin production by cultured vascular endothelial cells. *A. Eldor, R. Fridman, I. Vlodavsky, E. Hy-Am, Z. Fuks, and A. Panet* 251

Rapid Publications

Pancytopenia as a clonal disorder of a multipotent hematopoietic stem cell. *J. L. Abkowitz, P. J. Fialkow, D. J. Niebrugge, W. H. Raskind, and J. W. Adamson* 258

A luteinizing hormone-releasing hormone agonist decreases biological activity and modifies chromatographic behavior of luteinizing hormone in man. *R. M. Evans, G. C. Doelle, J. Lindner, V. Bradley, and D. Rabin* 262

HLA-DR histocompatibility leukocyte antigens permit cultured human melanoma cells from early but not advanced disease to stimulate autologous lymphocytes. *D. Guerry IV, M. A. Alexander, M. F. Herlyn, L. M. Zehngebot, K. F. Mitchell, C. M. Zmijewski, and E. J. Lusk* 267

Dietary omega-3 fatty acid deficiency and visual loss in *infant rhesus monkeys. M. Neuringer, W. E. Connor, C. Van Petten, and L. Barstad* 272

Immunoreactive β-endorphin in a subpopulation of mouse spleen macrophages. *S. J. Lolait, A. T. W. Lim, B. H. Toh, and J. W. Funder* 277

January Author Index 281

Contents

The Journal of Clinical Investigation
February 1984, Volume 73, Number 2

Perspectives

Proton transport and cell function. *H. E. Ives and F. C. Rector, Jr.* 285

Regular Articles

An altered platelet granule glycoprotein in patients with essential thrombocythemia. *W. J. Booth, M. C. Berndt, and P. A. Castaldi* 291

Cloning of chromosomal DNA from *Haemophilus influenzae*. Its use for studying the expression of type b capsule and virulence. *E. R. Moxon, R. A. Deich, and C. Connelly* 298

Two distinct forms of Factor VIII coagulant protein in human plasma. Cleavage by thrombin, and differences in coagulant activity and association with von Willebrand factor. *M. J. Weinstein and L. E. Chute* 307

Systemic circulatory adjustments to acute hypoxia and reoxygenation in unanesthetized sheep. Role of renin, angiotensin II, and catecholamine interactions. *D. Davidson and S. A. Stalcup* 317

Nature of the renal injury following total renal ischemia in man. *B. D. Myers, D. C. Miller, J. T. Mehigan, C. Olcott IV, H. Golbetz, C. R. Robertson, G. Derby, R. Spencer, and S. Friedman* 329

Human auto-antiidiotypes regulating T cell-mediated reactivity to tetanus toxoid. *A. Saxon and E. Barnett* . . . 342

Autoradiographic characterization of beta adrenergic receptors in coronary blood vessels and myocytes in normal and ischemic myocardium of the canine heart. *K. H. Muntz, E. G. Olson, G. R. Lariviere, S. D'Souza, A. Mukherjee, J. T. Willerson, and L. M. Buja* 349

Control of cardiac output in thyrotoxic calves. Evaluation of changes in the systemic circulation. *S. Goldman, M. Olajos, and E. Morkin* 358

Myeloperoxidase modulates the phagocytic activity of polymorphonuclear neutrophil leukocytes. Studies with cells from a myeloperoxidase-deficient patient. *O. Stendahl, B.-I. Coble, C. Dahlgren, J. Hed, and L. Molin* 366

Lingual lipase in cystic fibrosis. Quantitation of enzyme activity in the upper small intestine of patients with exocrine pancreatic insufficiency. *C. K. Abrams, M. Hamosh, V. S. Hubbard, S. K. Dutta, and P. Hamosh* 374

Selective inhibition of acetaminophen oxidation and toxicity by cimetidine and other histamine H_2-receptor antagonists in vivo and in vitro in the rat and in man. *M. C. Mitchell, S. Schenker, and K. V. Speeg, Jr.* 383

Characterization and partial purification of an endothelial cell growth factor from human platelets. *G. L. King and S. Buchwald* 392

Influence of methimazole on murine thyroiditis. Evidence for immunosuppression in vivo. *T. F. Davies, I. Weiss, and M. A. Gerber* 397

Epinephrine supports the postabsorptive plasma glucose concentration and prevents hypoglycemia when glucagon secretion is deficient in man. *S. G. Rosen, W. E. Clutter, M. A. Berk, S. D. Shah, and P. E. Cryer* 405

Increased proteolysis. An effect of increases in plasma cortisol within the physiologic range. *P. S. Simmons, J. M. Miles, J. E. Gerich, and M. W. Haymond* 412

Interaction of von Willebrand factor with human platelets in the plasma milieu. *J. Schullek, J. Jordan, and R. R. Montgomery* 421

Characterization of hepatic low density lipoprotein binding and cholesterol metabolism in normal and homozygous familial hypercholesterolemic subjects. *J. M. Hoeg, S. J. Demosky, Jr., E. J. Schaefer, T. E. Starzl, and H. B. Brewer, Jr.* 429

Characterization of inactive renin ("prorenin") from renin-secreting tumors of nonrenal origin. Similarity to inactive renin from kidney and normal plasma. *S. A. Atlas, T. E. Hesson, J. E. Sealey, B. Dharmgrongartama, J. H. Laragh, M. C. Ruddy, and M. Aurell* 437

Possible mechanism of phorbol diester-induced maturation of human promyelocytic leukemia cells. Activation of protein kinase C. *G. R. Vandenbark, L. J. Kuhn, and J. E. Niedel* 448

Biopterin synthesis defect. Treatment with L-dopa and 5-hydroxytryptophan compared with therapy with a tetrahydropterin. *R. R. McInnes, S. Kaufman, J. J. Warsh, G. R. Van Loon, S. Milstien, G. Kapatos, S. Soldin, P. Walsh, D. MacGregor, and W. B. Hanley* 458

Role of iron in *Trypanosoma cruzi* infection of mice. *R. G. Lalonde and B. E. Holbein* 470

Static and dynamic rigidities of normal and sickle erythrocytes. Major influence of cell hemoglobin concentration. *E. Evans, N. Mohandas, and A. Leung* . . 477

Reactions of immunoglobulin G-binding ligands with platelets and platelet-associated immunoglobulin G. *W. F. Rosse, D. V. Devine, and R. Ware* 489

Correlation between ventilation and brain blood flow during sleep. *T. V. Santiago, E. Guerra, J. A. Neubauer, and N. H. Edelman* 497

Angiotensin II directly stimulates sodium transport in rabbit proximal convoluted tubules. *V. L. Schuster, J. P. Kokko, and H. R. Jacobson* 507

Ontogeny of Fc receptors and complement receptor (CR3) during human myeloid differentiation. *H. B. Fleit, S. D. Wright, C. J. Durie, J. E. Valinsky, and J. C. Unkeless* 516

Role of endogenous secretin in acid-induced inhibition of human gastric function. *J. H. Kleibeuker, V. E. Eysselein, V. E. Maxwell, and J. H. Walsh* 526

Arginine vasopressin potentiates adrenocorticotropin release induced by ovine corticotropin-releasing factor. *C. R. DeBold, W. R. Sheldon, G. S. DeCherney, R. V. Jackson, A. N. Alexander, W. Vale, J. Rivier, and D. N. Orth* 533

Encainide and its metabolites. Comparative effects in man on ventricular arrhythmia and electrocardiographic intervals. *E. L. Carey, Jr., H. J. Duff, D. M. Roden, R. K. Primm, G. R. Wilkinson, T. Wang, J. A. Oates, and R. L. Woosley* 539

Inhibition of platelet-aggregating activity in thrombotic thrombocytopenic purpura plasma by normal adult immunoglobulin G. *E. C.-Y. Lian, P. T. K. Mui, F. A. Siddiqui, A. Y. Y. Chiu, and L. L. S. Chiu* 548

Regulation of human peripheral blood monocyte DR antigen expression in vitro by lymphokines and recombinant interferons. *M. B. Sztein, P. S. Steeg, H. M. Johnson, and J. J. Oppenheim* 556

Effect of chronic sham feeding on maximal gastric acid secretion in the dog. *R. C. Thirlby and M. Feldman* . . . 566

Peripheral tissue mechanism for maintenance of serum triiodothyronine values in a thyroxine-deficient state in man. *S. M. C. Lum, J. T. Nicoloff, C. A. Spencer, and E. M. Kaptein* 570

Calcitriol but no other metabolite of vitamin D is essential for normal bone growth and development in the rat. *A. M. Parfitt, C. H. E. Mathews, R. Brommage, K. Jarnagin, and H. F. DeLuca* 576

Rapid Publications

In vitro enhancement of immunoglobulin gene expression in chronic lymphocytic leukemia. *J. Cossman, L. M. Neckers, R. M. Braziel, J. B. Trepel, S. J. Korsmeyer, and A. Bakhshi* 587

Normal testicular structure and reproductive function in deermice lacking retinol and alcohol dehydrogenase activity. *M. A. Leo and C. S. Lieber* 593

February Author Index 597

Contents

The Journal of Clinical Investigation
March 1984, Volume 73, Number 3

Perspectives

The respiratory burst of phagocytes. *B. M. Babior* 599

Regular Articles

Ammonia production by individual segments of the rat nephron. *D. W. Good and M. B. Burg* 602

Presence of complement-fixing anti-endothelial cell antibodies in systemic lupus erythematosus. *D. B. Cines, A. P. Lyss, M. Reeber, M. Bina, and R. J. DeHoratius* 611

Identification and function of the high affinity binding sites for Ca^{2+} on the surface of platelets. *L. F. Brass and S. J. Shattil* 626

Effect of beta and alpha adrenergic blockade on glucose-induced thermogenesis in man. *R. A. DeFronzo, D. Thorin, J. P. Felber, D. C. Simonson, D. Thiebaud, E. Jequier, and A. Golay* 633

An evaluation of the importance of gastric acid secretion in the absorption of dietary calcium. *G. W. Bo-Linn, G. R. Davis, D. J. Buddrus, J. G. Morawski, C. Santa Ana, and J. S. Fordtran* 640

Leukocyte β-receptor alterations in hypertensive subjects. *R. D. Feldman, L. E. Limbird, J. Nadeau, D. Robertson, and A. J. J. Wood* 648

Biosynthesis of coagulation Factor V by a human hepatocellular carcinoma cell line. *D. B. Wilson, H. H. Salem, J. S. Mruk, I. Maruyama, and P. W. Majerus* 654

Taurocholate transport by rat liver canalicular membrane vesicles. Evidence for the presence of an Na^+-independent transport system. *M. Inoue, R. Kinne, T. Tran, and I. M. Arias* 659

Influence of hyperglycemia on insulin's in vivo effects in Type II diabetes. *R. R. Revers, R. Fink, J. Griffin, J. M. Olefsky, and O. G. Kolterman* 664

Influence of obesity on the antilipolytic effect of insulin in isolated human fat cells obtained before and after glucose ingestion. *P. Arner, J. Bolinder, P. Engfeldt, J. Hellmér, and J. Östman* 673

Effect of acyclovir treatment of primary genital herpes on the antibody response to herpes simplex virus. *R. L. Ashley and L. Corey* 681

Relationship between systemic lupus erythematosus T cell subsets, anti-T cell antibodies, and T cell functions. *C. Morimoto, E. L. Reinherz, J. A. Distaso, A. D. Steinberg, and S. F. Schlossman* 689

Deficient flavoprotein component of the NADPH-dependent O_2^--generating oxidase in the neutrophils from three male patients with chronic granulomatous disease. *T. G. Gabig and B. A. Lefker* 701

Glutathione redox cycle protects cultured endothelial cells against lysis by extracellularly generated hydrogen peroxide. *J. M. Harlan, J. D. Levine, K. S. Callahan, B. R. Schwartz, and L. A. Harker* 706

Familial hyperproinsulinemia. Two cohorts secreting indistinguishable type II intermediates of proinsulin conversion. *D. C. Robbins, S. E. Shoelson, A. H. Rubenstein, and H. S. Tager* 714

Myoadenylate deaminase deficiency. Functional and metabolic abnormalities associated with disruption of the purine nucleotide cycle. *R. L. Sabina, J. L. Swain, C. W. Olanow, W. G. Bradley, W. N. Fishbein, S. DiMauro, and E. W. Holmes* 720

1α,25-Dihydroxyvitamin D_3 induces maturation of the human monocyte cell line U937, and, in association with a factor from human T lymphocytes, augments production of the monokine, mononuclear cell factor. *E. P. Amento, A. K. Bhalla, J. T. Kurnick, R. L. Kradin, T. L. Clemens, S. A. Holick, M. F. Holick, and S. M. Krane* 731

Functional characterization of the alpha adrenergic receptor modulating the hydroosmotic effect of vasopressin on the rabbit cortical collecting tubule. *R. K. Krothapalli and W. N. Suki* 740

Metabolic effects of very low calorie weight reduction diets. *L. J. Hoffer, B. R. Bistrian, V. R. Young, G. L. Blackburn, and D. E. Matthews* 750

Dietary vitamin D is essential for normal insulin secretion from the perfused rat pancreas. *S. Kadowaki and A. W. Norman* 759

Albumin absorption and catabolism by isolated perfused proximal convoluted tubules of the rabbit. *C. H. Park and T. Maack* 767

Specific glutaryl-CoA dehydrogenating activity is deficient in cultured fibroblasts from glutaric aciduria patients. *D. B. Hyman and K. Tanaka* 778

Effects of glucagon on plasma amino acids. *G. Boden, I. Rezvani, and O. E. Owen* 785

Evidence that glycocalicin circulates in normal plasma. *B. S. Coller, E. Kalomiris, M. Steinberg, and L. E. Scudder* 794

Relationship between obesity and maximal insulin-stimulated glucose uptake in vivo and in vitro in Pima Indians. *C. Bogardus, S. Lillioja, D. Mott, G. R. Reaven, A. Kashiwagi, and J. E. Foley* 800

Degradation of fibrin and elastin by intact human alveolar macrophages in vitro. Characterization of a plasminogen activator and its role in matrix degradation. *H. A. Chapman, Jr., O. L. Stone, and Z. Vavrin* 806

Isolation and characterization of apolipoprotein B-48 and B-100 very low density lipoproteins from type III hyperlipoproteinemic subjects. *R. W. Milne, P. K. Weech, L. Blanchette, J. Davignon, P. Alaupovic, and Y. L. Marcel* 816

Role of vasopressin in regulation of renal kinin excretion in Long-Evans and diabetes insipidus rats. *M. L. Kauker, J. T. Crofton, L. Share, and A. Nasjletti* 824

Circulating DNA in systemic lupus erythematosus. Isolation and characterization. *C. R. Steinman* 832

Role of superoxide anion in host cell injury induced by *Mycoplasma pneumoniae* infection. A study in normal and trisomy 21 cells. *M. Almagor, I. Kahane, and S. Yatziv* 842

Surfactant and pulmonary blood flow distributions following treatment of premature lambs with natural surfactant. *A. Jobe, M. Ikegami, H. Jacobs, and S. Jones* 848

Kinetic compartmental analysis of carnitine metabolism in the human carnitine deficiency syndromes. Evidence for alterations in tissue carnitine transport. *C. J. Rebouche and A. G. Engel* 857

Transcobalamin II in human seminal plasma. *R. Carmel and G. S. Bernstein* 868

Rapid Publications

Irreversible binding of conjugated bilirubin to albumin in cholestatic rats. *A. Gautam, H. Seligson, E. R. Gordon, D. Seligson, and J. L. Boyer* 873

Phorbol myristate acetate stimulates ATP-dependent calcium transport by the plasma membrane of neutrophils. *H. Lagast, T. Pozzan, F. A. Waldvogel, and P D. Lew* 878

Correction 885

March Author Index 887

Contents

The Journal of Clinical Investigation
April 1984, Volume 73, Number 4

Perspectives

The biologically active leukotrienes. Biosynthesis, metabolism, receptors, functions, and pharmacology. *R. A. Lewis and K. F. Austen* 889

Regular Articles

Qualitative and quantitative differences in the pathways of extrathyroidal triiodothyronine generation between euthyroid and hypothyroid rats. *J. E. Silva, M. B. Gordon, F. R. Crantz, J. L. Leonard, and P. R. Larsen* 898

In vivo evidence of impaired solute transport by the thick ascending limb in potassium-depleted rats. *H. U. Gutsche, L. N. Peterson, and D. Z. Levine* 908

Mechanisms of glucagon secretion during insulin-induced hypoglycemia in man. Role of the beta cell and arterial hyperinsulinemia. *G. Bolli, P. De Feo, G. Perriello, S. De Cosmo, P. Compagnucci, F. Santeusanio, P. Brunetti, and R. H. Unger* 917

Role of volume in the regulation of vasopressin secretion during pregnancy in the rat. *W. M. Barron, B. A. Stamoutsos, and M. D. Lindheimer* 923

Human protein Z. *G. J. Broze, Jr. and J. P. Miletich* . . . 933

HLA-DR human histocompatibility leukocyte antigens-restricted lymphocyte-monocyte interactions in the release from monocytes of acidic isoferritins that suppress hematopoietic progenitor cells. *H. E. Broxmeyer, L. Juliano, L. Lu, E. Platzer, and B. Dupont* 939

Cleavage of human high molecular weight kininogen markedly enhances its coagulant activity. Evidence that this molecule exists as a procofactor. *C. F. Scott, L. D. Silver, M. Schapira, and R. W. Colman* 954

Vasoactive intestinal polypeptide. A neurotransmitter for lower esophageal sphincter relaxation. *P. Biancani, J. H. Walsh, and J. Behar* 963

Effects of thrombomodulin and coagulation Factor V_a-light chain on protein C activation in vitro. *H. H. Salem, N. L. Esmon, C. T. Esmon, and P. W. Majerus* 968

Common structural polymorphisms in human erythrocyte spectrin. *W. J. Knowles, M. L. Bologna, J. A. Chasis, S. L. Marchesi, and V. T. Marchesi* 973

Calcium and sodium transport and vitamin D metabolism in the spontaneously hypertensive rat. *H. P. Schedl, D. L. Miller, J. M. Pape, R. L. Horst, and H. D. Wilson* 980

Antibody-mediated bacterial adhesion to cytomegalovirus-induced Fc receptors. Potential relationship to secondary infections complicating herpesvirus infections. *P. A. Mackowiak, M. Marling-Cason, J. W. Smith, and J. P. Luby* 987

Immunoregulation by low density lipoproteins in man. Inhibition of mitogen-induced T lymphocyte proliferation by interference with transferrin metabolism. *J. A. Cuthbert and P. E. Lipsky* 992

Glucagon-stimulable adenylyl cyclase in rat liver. Effects of chronic uremia and intermittent glucagon administration. *R. R. Dighe, F. J. Rojas, L. Birnbaumer, and A. J. Garber* 1004

Glucagon-stimulable adenylyl cyclase in rat liver. The impact of streptozotocin-induced diabetes mellitus. *R. R. Dighe, F. J. Rojas, L. Birnbaumer, and A. J. Garber* . . 1013

A novel electrophoretic variant of human apolipoprotein E. Identification and characterization of apolipoprotein E1. *K. H. Weisgraber, S. C. Rall, Jr., T. L. Innerarity, R. W. Mahley, T. Kuusi, and C. Ehnholm* 1024

Internephron heterogeneity for carbonic anhydrase-independent bicarbonate reabsorption in the rat. *J. P. Frommer, M. E. Laski, D. E. Wesson, and N. A. Kurtzman* 1034

Oxygen at physiological concentrations. A potential, paradoxical mediator of reperfusion injury to mitochondria induced by phosphate. *L. G. Lange, M. Hartman, and B. E. Sobel* 1046

The effects of polycations on vascular permeability in the rat. A proposed role for charge sites. *V. M. Vehaskari, C. T.-C. Chang, J. K. Stevens, and A. M. Robson* 1053

Functional maturation of membrane potential changes and superoxide-producing capacity during differentiation of human granulocytes. *S. Kitagawa, M. Ohta, H. Nojiri, K. Kakinuma, M. Saito, F. Takaku, and Y. Miura* . . . 1062

Gamma interferon induces monocytoid differentiation in the HL-60 cell line. *E. D. Ball, P. M. Guyre, L. Shen, J. M. Glynn, C. R. Maliszewski, P. E. Baker, and M. W. Fanger* 1072

Decreased T lymphocyte migration in patients with malignancy mediated by a suppressor cell population. *D. G. Hesse, D. J. Cole, D. E. Van Epps, and R. C. Williams, Jr.* 1078

Cardiac conditioning ameliorates cardiac dysfunction associated with renal hypertension in rats. *T. F. Schaible, G. J. Ciambrone, J. M. Capasso, and J. Scheuer* 1086

A mutation that causes lability of the androgen receptor under conditions that normally promote transformation to the DNA-binding state. *W. J. Kovacs, J. E. Griffin, D. D. Weaver, B. R. Carlson, and J. D. Wilson* 1095

Unidirectional transfer of prostaglandin endoperoxides between platelets and endothelial cells. *A. I. Schafer, D. D. Crawford, and M. A. Gimbrone, Jr.* 1105

Isolation and purification of a pemphigus vulgaris antigen from human epidermis. *L. L. Peterson and K. D. Wuepper* 1113

Influence of hemodynamic forces on vascular endothelial function. In vitro studies of shear stress and pinocytosis in bovine aortic cells. *P. F. Davies, C. F. Dewey, Jr., S. R. Bussolari, E. J. Gordon, and M. A. Gimbrone, Jr.* 1121

Abnormality of glycophorin-α on paroxysmal nocturnal hemoglobinuria erythrocytes. *C. J. Parker, C. M. Soldato, and W. F. Rosse* 1130

Renin biosynthesis by human tumoral juxtaglomerular cells. Evidences for a renin precursor. *F. X. Galen, C. Devaux, A. M. Houot, J. Menard, P. Corvol, M. T. Corvol, N. C. Gubler, F. Mounier, and J. P. Camilleri* . . 1144

The effects of chenodiol on biliary lipids and their association with gallstone dissolution in the National Cooperative Gallstone Study (NCGS). *S. M. Grundy, S.-P. Lan, J. Lachin, the Steering Committee (R. A. Baum, R. L. Habig, R. F. Hanson, T. Hersh, N. C. Hightower, A. F. Hofmann, E. C. Lasser, J. W. Marks, H. Mekhjian, R. Okun, R. A. Schaefer, L. J. Schoenfield, L. Shaw, R. D. Soloway, J. L. Thistle, F. P. Thomas, M. P. Tyor), and the National Cooperative Gallstone Study Group* 1156

Effects of chronic renal failure on protein synthesis and albumin messenger ribonucleic acid in rat liver. *M. A. Zern, S. H. Yap, R. K. Strair, G. A. Kaysen, and D. A. Shafritz* 1167

Proteases and oxidants in experimental pulmonary inflammatory injury. *I. U. Schraufstätter, S. D. Revak, and C. G. Cochrane* 1175

Correlation between muscle glycogen synthase activity and in vivo insulin action in man. *C. Bogardus, S. Lillioja, K. Stone, and D. Mott* 1185

Pathogenesis of foreign body infection. Evidence for a local granulocyte defect. *W. Zimmerli, P. D. Lew, and F. A. Waldvogel* 1191

The biology of tumor growth in the non-Hodgkin's lymphomas. A dual parameter flow cytometry study of 220 cases. *S. E. Shackney, A. M. Levine, R. I. Fisher, P. Nichols, E. Jaffe, W. H. Schuette, R. Simon, C. A. Smith, S. J. Occhipinti, J. W. Parker, J. Cossman, R. C. Young, and R. J. Lukes* 1201

Receptor-specific mediation by immunoglobulin E of antigen-induced contraction of tracheal and lung parenchymal strips isolated from the guinea pig. *F. M. Graziano, L. Gundersen, L. A. Larson, P. Harley, and C. K. Buckner* 1215

Rapid Publications

Resorption of implanted bone prepared from normal and warfarin-treated rats. *J. B. Lian, M. Tassinari, and J. Glowacki* 1223

Effect of platelet-activating factor and serum-treated zymosan on prostaglandin E_2 synthesis, arachidonic acid release, and contraction of cultured rat mesangial cells. *D. Schlondorff, J. A. Satriano, J. Hagege, J. Perez, and L. Baud* 1227

Immunoglobulin μ-chain gene rearrangement in a patient with T cell acute lymphoblastic leukemia. *K. Ha, M. Minden, N. Hozumi, and E. W. Gelfand* 1232

β-Endorphin inhibits glucose production in the conscious dog. *P. M. Radosevich, P. E. Williams, J. R. McRae, W. W. Lacy, D. N. Orth, and N. N. Abumrad* 1237

Retraction 1243

April Author Index 1245

Contents

The Journal of Clinical Investigation
May 1984, Volume 73, Number 5

Perspectives

Surface-mediated defense reactions. The plasma contact activation system. *R. W. Colman* 1249

Regular Articles

Effect of human polymorphonuclear and mononuclear leukocytes on chromosomal and plasmid DNA of *Escherichia coli*. Role of acid DNase. *M. Rozenberg-Arska, J. A. G. van Strijp, W. P. M. Hoekstra, and J. Verhoef* 1254

New avian model of experimental glomerulonephritis consistent with mediation by cellular immunity. Nonhumorally mediated glomerulonephritis in chickens. *W. K. Bolton, F. L. Tucker, and B. C. Sturgill* 1263

Glucocorticoids modulate macrophage surface oligosaccharides and their bone binding activity. *Z. Bar-Shavit, A. J. Kahn, L. E. Pegg, K. R. Stone, and S. L. Teitelbaum* 1277

Similar acid stimulatory potencies of synthetic human big and little gastrins in man. *V. E. Eysselein, V. Maxwell, T. Reedy, E. Wünsch, and J. H. Walsh* 1284

Effective treatment of verapamil intoxication with 4-aminopyridine in the cat. *S. Agoston, E. Maestrone, E. J. van Hezik, J. M. Ket, M. C. Houwertjes, and D. R. A. Uges* 1291

Neutrophils degrade subendothelial matrices in the presence of alpha-1-proteinase inhibitor. Cooperative use of lysosomal proteinases and oxygen metabolites. *S. J. Weiss and S. Regiani* 1297

Metabolic clearance and plasma disappearance rates of human pancreatic tumor growth hormone releasing factor in man. *L. A. Frohman, J. L. Thominet, C. B. Webb, M. L. Vance, H. Uderman, J. Rivier, W. Vale, and M. O. Thorner* 1304

Induction of human interleukin-1 by a product of *Staphylococcus aureus* associated with toxic shock syndrome. *T. Ikejima, C. A. Dinarello, D. M. Gill, and S. M. Wolff* 1312

Expiratory flow limitation and the response to breathing a helium-oxygen gas mixture in a canine model of pulmonary emphysema. *S. N. Mink* 1321

Impaired formation of β-adrenergic receptor-nucleotide regulatory protein complexes in pseudohypoparathyroidism. *J. A. Heinsimer, A. O. Davies, R. W. Downs, M. A. Levine, A. M. Spiegel, M. K. Drezner, A. De Lean, K. A. Wreggett, M. G. Caron, and R. J. Lefkowitz* 1335

An in vivo analysis of pancreatic protein and insulin biosynthesis in a rat model for non-insulin-dependent diabetes. *M. A. Permutt, K. Kakita, P. Malinas, I. Karl, S. Bonner-Weir, G. Weir, and S. J. Giddings* 1344

Human insulin B24 (Phe → Ser). Secretion and metabolic clearance of the abnormal insulin in man and in a dog model. *S. E. Shoelson, K. S. Polonsky, A. Zeidler, A. H. Rubenstein, and H. S. Tager* 1351

Relationship between regional myocardial blood flow and thallium-201 distribution in the presence of coronary artery stenosis and dipyridamole-induced vasodilation. *A E. Mays, Jr. and F. R. Cobb* 1359

Turnover and splanchnic metabolism of free fatty acids and ketones in insulin-dependent diabetics at rest and in response to exercise. *J. Wahren, Y. Sato, J. Östman, L. Hagenfeldt, and P. Felig* 1367

Antibody synthesis by bone marrow cells in vitro following primary and booster tetanus toxoid immunization in humans. *H. Kodo, R. P. Gale, and A. Saxon* 1377

Inert gas analysis of ventilation-perfusion matching during hemodialysis. *D. D. Ralph, S. M. Ott, D. J. Sherrard, and M. P. Hlastala* 1385

Kinetics of the Factor XIa catalyzed activation of human blood coagulation Factor IX, *P. N. Walsh, H. Bradford, D. Sinha, J. R. Piperno, and G. P. Tuszynski* 1392

The genesis of the third and fourth heart sounds. A pressure-flow study in dogs. *F. Van de Werf, J. Minten, P. Carmeliet, H. De Geest, and H. Kesteloot* 1400

Rapid changes in light scattering from human polymorphonuclear leukocytes exposed to chemoattractants. Discrete responses correlated with chemotactic and secretory functions. *I. Yuli and R. Snyderman* 1408

Role of thyroid hormone in postnatal circulatory and metabolic adjustments. *J. A. Breall, A. M. Rudolph, and M. A. Heymonn* 1418

Insulin suppresses growth hormone secretion by rat pituitary cells. *S. Melmed* 1425

Gastrin receptors on isolated canine parietal cells. *A. H. Soll, D. A. Amirian, L. P. Thomas, T. J. Reedy, and J. D. Elashoff* 1434

Hemodynamic basis for glomerular injury in rats with desoxycorticosterone-salt hypertension. *L. D. Dworkin, T. H. Hostetter, H. G. Rennke, and B. M. Brenner* 1448

Silica-stimulated monocytes release fibroblast proliferation factors identical to interleukin 1. A potential role for interleukin 1 in the pathogenesis of silicosis. *J. A. Schmidt, C. N. Oliver, J. L. Lepe-Zuniga, I. Green, and I. Gery* 1462

Effects of pressure overload, left ventricular hypertrophy on β-adrenergic receptors, and responsiveness to catecholamines. *D. E. Vatner, C. J. Homcy, S. P. Sit, W. T. Manders, and S. F. Vatner* 1473

Rapid Publications

Inhibitors of prostaglandin synthesis or cathepsin B prevent muscle wasting due to sepsis in the rat. *R. L. Ruff and D. Secrist* 1483

Gallium nitrate inhibits calcium resorption from bone and is effective treatment for cancer-related hypercalcemia. *R. P. Warrell, Jr., R. S. Bockman, C. J. Coonley, M. Isaacs, and H. Staszewski* 1487

Carrier detection of Hemophilia B by using a restriction site polymorphism associated with the coagulation Factor IX gene. *L. Grunebaum, J.-P. Cazenave, G. Camerino, C. Kloepfer, J.-L. Mandel, P. Tolstoshev, M. Jaye, H. De la Salle, and J.-P. Lecocq* 1491

May Author Index 1497

Contents

The Journal of Clinical Investigation
June 1984, Volume 73, Number 6

Perspectives

Sleep apnea and its causes. *N. S. Cherniack* 1501

Regular Articles

Lithocholate glucuronide is a cholestatic agent. *D. G. Oelberg, M. V. Chari, J. M. Little, E. W. Adcock, and R. Lester* 1507

Interaction of primate alveolar macrophages and *Legionella pneumophila*. *R. F. Jacobs, R. M. Locksley, C. B. Wilson, J. E. Haas, and S. J. Klebanoff* 1515

Tissue factor activity. A marker of alveolar macrophage maturation in rabbits. Effects of granulomatous pneumonitis. *H. Rothberger, M. P. McGee, and T.-K. Lee* 1524

Defective glucose counterregulation after subcutaneous insulin in noninsulin-dependent diabetes mellitus. Paradoxical suppression of glucose utilization and lack of compensatory increase in glucose production, roles of insulin resistance, abnormal neuroendocrine responses, and islet paracrine interactions. *G. B. Bolli, E. Tsalikian, M. W. Haymond, P. E. Cryer, and J. E. Gerich* 1532

Inactivation of Factor XII active fragment in normal plasma. Predominant role of $C\bar{1}$ inhibitor. *A. de Agostini, H. R. Lijnen, R. A. Pixley, R. W. Colman, and M. Schapira* 1542

Blood coagulation Factor XIa binds specifically to a site on activated human platelets distinct from that for Factor XI. *D. Sinha, F. S. Seaman, A. Koshy, L. C. Knight, and P. N. Walsh* 1550

Diversity of autoantibodies in avian scleroderma. An inherited fibrotic disease of White Leghorn chickens. *D. C. Haynes and M. E. Gershwin* 1557

An unusual pattern of peptide-bound lysine metabolism in collagen from an infant with lethal perinatal osteogenesis imperfecta. *O. M. Petrovic and E. J. Miller* 1569

Iron mobilization from ferritin by superoxide derived from stimulated polymorphonuclear leukocytes. Possible mechanism in inflammation diseases. *P. Biemond, H. G. van Eijk, A. J. G. Swaak, and J. F. Koster* 1576

Effect of dietary phosphorus on circulating concentrations of 1,25-dihydroxyvitamin D and immunoreactive parathyroid hormone in children with moderate renal insufficiency. *A. A. Portale, B. E. Booth, B. P. Halloran, and R. C. Morris, Jr.* 1580

Physiocochemical and histological changes in the arterial wall of nonhuman primates during progression and regression of atherosclerosis. *D. M. Small, M. G. Bond, D. Waugh, M. Prack, and J. K. Sawyer* 1590

Cellular defenses against *Toxoplasma gondii* in newborns. *C. B. Wilson and J. E. Haas* 1606

Quantitative variation of the common acute lymphoblastic leukemia antigen (gp100) on leukemic marrow blasts. *A. T. Look, S. L. Melvin, L. K. Brown, M. E. Dockter, P. K. Roberson, and S. B. Murphy* 1617

Activation of the oxidative burst in human monocytes is associated with inhibition of methionine-dependent methylation of neutral lipids and phospholipids. *E. Bonvini, P. Bougnoux, H. C. Stevenson, P. Miller, and T. Hoffman* 1629

Neuroendocrine regulation of the corpus luteum in the human. Evidence for pulsatile progesterone secretion. *M. Filicori, J. P. Butler, and W. F. Crowley, Jr.* 1638

Adrenergic blockade alters glucose kinetics during exercise in insulin-dependent diabetics. *D. C. Simonson, V. Koivisto, R. S. Sherwin, E. Ferrannini, R. Hendler, A. Juhlin-Dannfelt, and R. A. DeFronzo* 1648

Interactions of lysyl-bradykinin and antidiuretic hormone in the rabbit cortical collecting tubule. *V. L. Schuster, J. P. Kokko, and H. R. Jacobson* 1659

Impaired vitamin D metabolism with aging in women. Possible role in pathogenesis of senile osteoporosis. *K.-S. Tsai, H. Heath III, R. Kumar, and B. L. Riggs* . . 1668

Hematologic and biosynthetic studies in homozygous hemoglobin Constant Spring. *S. Derry, W. G. Wood, M. Pippard, J. B. Clegg, D. J. Weatherall, S. N. Wickramasinghe, J. Darley, S. Fucharoen, and P. Wasi* 1673

Differential roles of splanchnic and peripheral tissues in the pathogenesis of impaired glucose tolerance. *L. Saccà, G. Orofino, A. Petrone, and C. Vigorito* 1683

A molecular defect of spectrin in a subset of patients with hereditary elliptocytosis. Alterations in the α-subunit domain involved in spectrin self-association. *J. Lawler, S.-C. Liu, J. Palek, and J. Prchal* 1688

Regulation of Factor IX_a in vitro in human and mouse plasma and in vivo in the mouse. Role of the endothelium and the plasma proteinase inhibitors. *H. E. Fuchs, H. G. Trapp, M. J. Griffith, H. R. Roberts, and S. V. Pizzo* 1696

An electrogenic proton-translocating adenosine triphosphatase from bovine kidney medulla. *S. Gluck and Q. Al-Awqati* 1704

Functional and phenotypic comparison of human T cell leukemia/lymphoma virus positive adult T cell leukemia with human T cell leukemia/lymphoma virus negative Sézary leukemia, and their distinction using anti-Tac. Monoclonal antibody identifying the human receptor for T cell growth factor. *T. A. Waldmann, W. C. Greene, P. S. Sarin, C. Saxinger, D. W. Blayney, W. A. Blattner, C. K. Goldman, K. Bongiovanni, S. Sharrow, J. M. Depper, W. Leonard, T. Uchiyama, and R. C. Gallo* 1711

Lipoproteins containing apoprotein B are a major regulator of neutrophil responses to monosodium urate crystals. *R. Terkeltaub, L. K. Curtiss, A. J. Tenner, and M. H. Ginsberg* 1719

Effective and fibrin-specific clot lysis by a zymogen precursor form of urokinase (pro-urokinase). A study in vitro and in two animal species. *V. Gurewich, R. Pannell, S. Louie, P. Kelley, R. L. Suddith, and R. Greenlee* 1731

Hemoglobin Evanston (α14 Trp → Arg). An unstable α-chain variant expressed as α-thalassemia. *G. R. Honig, M. Shamsuddin, L. N. Vida, M. Mompoint, E. Valcourt, L. J. Bowie, E. C. Jones, P. A. Powers, R. A. Spritz, M. Guis, S. H. Embury, J. Conboy, Y. W. Kan, W. C. Mentzer, S. C. Weil, R. K. Hirata, J. Waloch, J. F. O'Riordan, and T. K. Goldstick* 1740

Tissue factor is a major stimulus for vegetation formation in enterococcal endocarditis in rabbits. *T. A. Drake, G. M. Rodgers, and M. A. Sande* 1750

Parasite antigen-specific human T cell lines and clones. Major histocompatibility complex restriction and B cell helper function. *T. B. Nutman, E. A. Ottesen, A. S. Fauci, and D. J. Volkman* 1754

Defective beta adrenergic response of cystic fibrosis sweat glands in vivo and in vitro. *K. Sato and F. Sato* 1763

Effect of *N*-acetylcysteine on the pulmonary response to endotoxin in the awake sheep and upon in vitro granulocyte function. *G. R. Bernard, W. D. Lucht, M. E. Niedermeyer, J. R. Snapper, M. L. Ogletree, and K. L. Brigham* 1772

Rapid Publications

L-Carnitine enhances excretion of propionyl Coenzyme A as propionylcarnitine in propionic acidemia. *C. R. Roe, D. S. Millington, D. A. Maltby, T. P. Bohan, and C. L. Hoppel* 1785

Abnormally elevated frequency of Epstein-Barr virus-infected B cells in the blood of patients with rheumatoid arthritis. *G. Tosato, A. D. Steinberg, R. Yarchoan, C. A. Heilman, S. E. Pike, V. De Seau, and R. M. Blaese* 1789

June Author Index 1797

Author Index to Volume 73 1799